

# *The* AMERICAN RIFLEMAN

The Rifle 1885, Shooting & Fishing 1888, Arms & the Man 1906



VOLUME LXXI

NUMBER 13

**DECEMBER 1, 1923**

**A Cartridge-Trouble Nomenclature**

By E. C. Crossman

**The Theory of Ballistics**

By Maj. G. P. Wilhelm

**Shotguns, Powders and Cartridges**

By Capt. Chas. Askins

**Walter's Uncle Jim**

By Carl Elmo Freeman

**Rifle Shooting in Schools and Colleges**

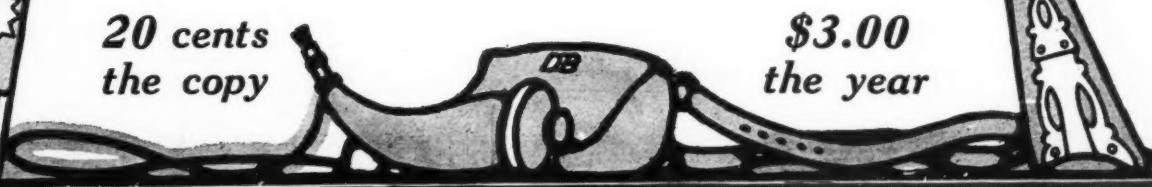
By W. R. Stokes

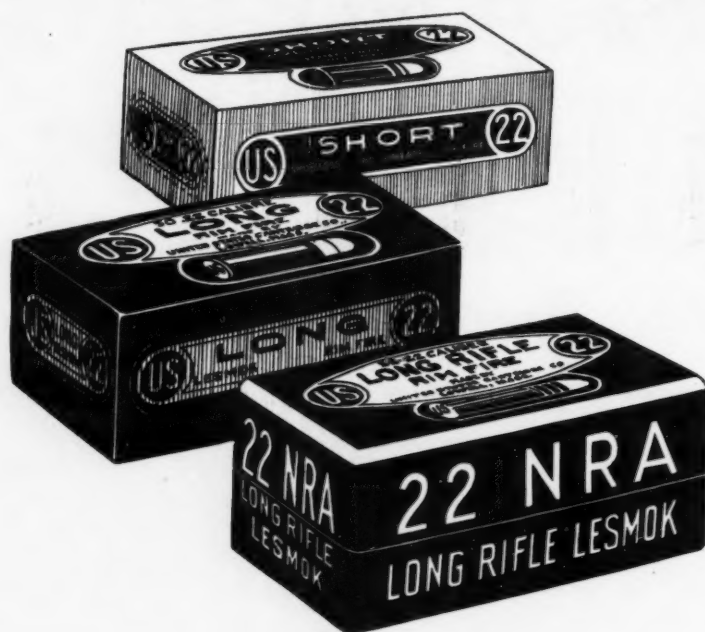
**The Stocking of Match Rifles**

By Stephen Trask

**20 cents  
the copy**

**\$3.00  
the year**





## *The end of barrel rust and pitting*

MANY a rifle is "shot out" in less than five thousand rounds because of barrel rust and consequent pitting induced by the corrosive priming of cartridges. Such a priming leaves a deposit on the bore of a rifle. This deposit readily absorbs moisture which with air, in contact with steel, causes rust. Pitting of the rifling then results and the accuracy of the arm is destroyed.

All US Rim-Fire Cartridges, including .22 Shorts, .22 Longs and the famous .22 N.R.A.'s, are primed with a special non-fouling, non-corrosive priming—a priming that with ordinary care in cleaning makes rusting and pitting things of the past. By shooting US Rim-Fires, you can maintain the accuracy-life of your barrel indefinitely. We have in our possession a rifle through which a quarter million rounds have been fired, and the barrel is still as smooth and as accurate as on the day it was made.

The next time you buy rim-fire ammunition for rifle, revolver or pistol, try US Cartridges—the kind with the perfected priming. You will be pleased with their accuracy, uniformity and cleanliness.

We have some very interesting exhibits showing the results of tests with our non-rusting, non-pitting priming. We shall be glad to send this information on request.

### UNITED STATES CARTRIDGE COMPANY

111 Broadway

New York, N. Y.



Vo

I

R  
tr  
er  
m

d  
o  
st  
sl  
th  
w  
m  
m

n  
n  
p  
g  
r  
o  
w  
c  
d  
c

A  
e  
w  
o  
a  
t

t

c

g



# The AMERICAN RIFLEMAN

The Publication of the National Rifle Association of America

Vol. LXXI, No. 13

WASHINGTON, D. C., DECEMBER 1, 1923

\$3.00 a Year. 20 Cents a Copy

## A Cartridge-Trouble Nomenclature

By E. C. Crossman

I HAVE noticed a rather loose and indefinite system of describing the various faults to which metallic ammunition is prone, in the accounts and the questions printed in THE AMERICAN RIFLEMAN. To facilitate the correct description of these troubles, I print herewith the nomenclature used by the Government Arsenals, together with a description of what each one means.

In times past the rifleman equipped with more than a fair degree of even a practical knowledge of ballistics was more or less of a rarity, except those coteries of shooters which produced such men as Leopold, Hudson and Gould. Today the number of shooters who bring considerable ballistic intelligence to bear on their shooting problems is steadily increasing. To ascertain to what degree the present day rifleman is developing an inquiring mind, it is necessary only to attend an evening session on commercial row at the national matches.

And so, more and more of late years, the civilian rifleman is not only concerning himself with whatever out of the ordinary may happen in connection with the ammunition he fires, but is prone to make inquiries to ascertain the causes. This investigatory trend is to be commended and if a standard vocabulary relating to metallic ammunition troubles is adopted, the efforts of the rifleman to describe just what has happened and its effects will be greatly facilitated. Also when he writes about his difficulties to the editors of sportsman magazines, as he so frequently does, the use of universally understood terms will more clearly convey his meaning.

The Experimental Department gentleman at the Springfield Armory once made up a neatly finished board for me, showing an example, sometimes sectioned—of each sort of trouble listed herewith, and I presume the board is still reposing in the Department of Experiment at Camp Benning. Needless to say it is considerably illuminating to persons not familiar with metallic ammunition troubles.

This is the list used:

**RUPTURE.** Complete separation of the circumference of the case. Usually a sign of excessive head-space.

**INCIPIENT RUPTURE.** Complete separation of a portion of the circumference of the case.

**STRETCH.** Visible strain on circumference of case, but no gas leak.

**BLOWN PRIMER.** Primer completely out of case.

**SET BACK PRIMER.** A primer showing above the head of the case, divided into "slight" and "great."

**MISFIRE.** Failure to ignite when primer shows a well defined blow from the firing pin.

**HANGFIRE.** Any delay in action of primer after being struck by firing pin. May be faulty primer or faulty seating in pocket.

**BATTERED CARTRIDGE.** Any deformation of cartridge that would prevent its chambering, due to transportation, manufacture, etc.

**LOW PRIMER.** Primer which is set farther than normal below the head of the case, resulting in misfire.

**PIERCED PRIMER.** Primer in which gas pressure has blown out section opposite firing pin. Sometimes due to a weak main-spring, cut off to ease bolt working, or set up through long use.

**PUNCTURED PRIMER.** Primer in which blow of firing pin has penetrated through.

**PRIMER LEAK.** Great and Small. Showing gas leakage and blackening around primer pocket.

**LIGHT BLOW.** Primer showing evidence of too-light blow of firing pin.

**PRIMER IN SIDEWAYS.** A common fault of certain makes of war ammunition, primer badly deformed, crushed in sideways.

**NO ANVIL.** To be detected by sectioning case or decapping. No anvil in primer to receive firing pin blow.

**INVERTED ANVIL.** Anvil with concave side toward blow of firing pin, failing to fire fulminate.

**RINGS.** Annular marks around the case, due to faulty chamber.

**SPLIT NECK AND SPLIT BODY.** Split in the case at the mouth, and split at the rear end just forward of cannellure. Nearly always due to faulty annealing, excessive brittle temper of brass. Split neck sometimes due to excess and long continued strain of bullet in neck.

**DRAW MARK.** Longitudinal and straight scratch or cut from base to neck, due to some abrasive material in the draw-press.

**LAMINATED CASE.** Scaly metal.

This list takes in most of the ills to which cartridges are heir, except that of no fulminate in the primer.

# EVERY DAY BALLISTICS



By  
**Maj. G. P. Wilhelm**  
Ordnance Department U. S. Army

## The Theory of Ballistics

### Part I

**I**N previous articles in this series the history and development of the science of ballistics was shown. The work of various early investigators was outlined from the beginning of the art down to the use of the latest types of laboratory apparatus for measuring time, pressure, trajectory and dispersion of small arms and ammunition at the Ordnance Department Proving Grounds at Aberdeen.

In the present discussion no attempt is going to be made to enter into the practical side of the question. The subject will be confined to the facts regarding bullet motion and the latest theories on the manner in which the phenomena accompanying the facts is interpreted. How to apply corrections and carry out the solution of the practical problems involved will be left to the next series of articles. It is hoped at that time to offer such solutions of ballistic problems and such easily followed methods of making test firings that the gun crank may intelligently comprehend enough of these problems to be his own ballisticians and proof officer.

This discussion will be based upon the U. S. Rifle, caliber .30, Model of 1903, using Model of 1906 ammunition, as this is the service rifle and ammunition and there is no other standard type of weapon with which the shooting fraternity is more familiar.

If it were left to a straw vote, the amateur shooter, and I include myself in that class, would probably be willing to dispense with any theory in connection with his favorite weapon or sport. What he wants to know are the facts. Unfortunately the facts are not always clear and before the facts and the practical side of the rifle and its ammunition can be discussed, it will be necessary to explain the theory of bullet motion from the time the bullet starts to move along the barrel until it finally lands at the extreme end of its trajectory.

The theory of bullet motion will be discussed under the two following heads:

First: Before the bullet leaves the muzzle, this being a phase of "Interior Ballistics"; and  
Second: After the bullet leaves the barrel, which is, of course, "Exterior Ballistics."

Before leaving the barrel, the bullet is acted upon by a number of forces, two of the most important being the action of the powder gases and the effect of the rifling.

Before discussing these forces and their effect on the passage of the bullet down the barrel, it will be well to state exactly what the service cartridge consists of.

The service bullet, weighing 150 grains and consisting of a lead core surrounded by a cupro nickel alloy jacket is discharged at 2700 feet per second with a variation above or below this velocity of twenty or thirty foot seconds. The propellant force is a charge of nitro cellulose powder weighing from 47 to 50 grains; each grain being cylindrical, perforated and graphited. The maximum pressure of the discharge is from 47,000 to 50,000 pounds and the effect of all this is to give a range to the bullet of about 3500 yards in air at an angle of departure of approximately thirty degrees.

The chief effect on the bullet by the powder gases and the rifling is the variation caused in muzzle velocity and the deformation of the bullet while it is in process of traveling through the bore.

An analysis of the action of the powder gases would be along the following lines: When the firing pin strikes the primer, the easily detonated composition, consisting of potassium chlorate and other compounds, ignites with an intensely hot flame which in passing through vents to the powder also ignites it. The gases released by the decomposition of the powder are many hundreds of times larger in volume than the powder grains. The net result of all this is that the gases exert a tremendous pressure and, like all gases, this pressure is exerted to an equal extent in all directions.

The expanding gases press upon the sides of the barrel and cause various kinds of vibrations more or less important. If the eye were keen enough, the barrel would be seen to swell as the bullet passes down the bore with the very great pressure of the powder gases behind it, so that, in an exaggerated way, it would look like an ostrich swallowing an egg, as Captain Crossman would express it.

The sides of the barrel cannot give to any appreciable extent unless it bursts, so that the work performed by the gas must be in two directions only, i. e., forward, following the bullet, and backward, making the recoil. If the rifle were unsupported and were the same weight as the bullet, the rifle would go backward just as fast as the bullet goes forward. On account of the great difference in mass of the two, the rifle moves back very slowly and a very short distance, comparatively speaking, while the bullet does the most of the moving.

In passing through the barrel, the bullet is squeezed by the bore and is considerably deformed by the action of the rifling. The pressure on the base of the bullet is supposed to be sufficient to upset it and thus completely seal the bore against any powder gases escaping past the bullet. If it were possible, in so far as the barrel is concerned, bullets should be made with piston rings, all the same as a flivver engine. This is done, to a certain extent, in artillery shells by the use of a copper band.

In passing down the barrel, of course the bullet is subjected to a heavy friction which, in turn, has a very great heating effect. The amount of heat has been variously estimated from less than five per cent of the total amount involved in firing the gun up to fifty per cent. In my opinion, the latter figure is absolutely ridiculous, as the powder gases are at a temperature of several thousand degrees centigrade and are acting through the entire one-thousandth of a second that the bullet takes to reach the muzzle, while

the friction reaches a very high figure only in the latter part of the travel of the bullet through the bore of the rifle.

So great is the conviction that the heat is very intense that attempts have recently been made in the design of automatic arms to so design the bullet as to reduce friction and thus give light weight weapons a longer sustained fire power before they go out of action from overheating. Such bullet design usually consists in reducing the amount of bearing by making the bullet something like a collar button with bands at each end and a slender waist, or by using bands like an artillery shell. Even if such bullets were practicable for firing through the bore, they would not have a good ballistic shape when passing through the air, as the bands would greatly increase air resistance and also affect the stability of the bullet.

The amount of the pressure of the gas on the barrel is small at first but rapidly increases to the maximum and then, as the bullet travels toward the muzzle, gradually decreases. With black powder, the rise is very sudden and the drop almost as quick, but with the modern, more progressive burning powders, the drop is very slow, so that the pressure on the bullet is nearly constant and continuous.

As a matter of fact, the work done by the powder gases in the bore which does not directly increase the velocity of the bullet is considerable. At least ten per cent is used up in friction, expansion of the bore, forcing the bullet from the case, engraving the lands on the bullet and in forcing out the column of air which, of course, always precedes the bullet out of the barrel. In the case of some bullets, such as the tin-plated bullet used in the National Matches of 1921, the bullet was so tightly fastened to the case by the tinning that it required a force of 300 pounds to extract it, as compared to the usual force of 150 pounds which is amply sufficient to extract the service bullet.

#### EFFECT OF VARIATION IN DIMENSIONS OF THE GUN

Before the bullet emerges from the muzzle it is also affected by a number of minor variations which, to a certain extent, control its future path. For instance, there are certain variations in the dimensions of the various component parts, such as the diameter of the lands, grooves, and chambers from the standard and the straightness of the barrel. If a barrel is not bored exactly straight originally (and few of them are) it must be straightened if very much off or the sights will be entirely out of line in order to bring the center of impact to coincide with the sights. Other things being equal, it is probably of a little advantage to have the barrel unstraightened, as then there cannot be as great a tendency to return to its original shape while firing. This movement is extremely small and undoubtedly is smaller than other errors caused by the pressure of the wood of the stock against the barrel and errors in the assembly of the sights.

All of the above variations particularly affect the trajectory by their influence on the initial

velocity. Any change in velocity invariably results in a corresponding change in the range and heights of the trajectory of the projectile at different points.

#### EFFECT OF VARIATIONS IN THE AMMUNITION

Variations in the ammunition will also affect the manner of final delivery of the bullet from the muzzle. The component parts of the ammunition, of course, are the primer; cartridge case; the weight and character of the powder; and the weight, type and character of the bullet itself. For instance, the kind of jacket material and the thickness of it, the degree of hardness of the core and the amount of bearing of the bullet, all have a vital effect. So difficult is this problem that it sometimes takes several years of intensive investigation on both the barrel and the bullets, as well as the powder and the case, before a new type is a success. A good example of this can be seen in the present success of the boat tail bullet, as compared to the early failures encountered with this type of projectile.

During manufacture, the ammunition is invariably made with slight variations which consist in the dimensions of the case, the bullet and the charge. The variations in the dimensions and character of the case, of course, alter its fit in the chamber and thus affect the velocity of the bullet. The velocity is also affected by the crimp or degree of pull required to separate the bullet from the case. The trajectory is also affected by some changes in the shape, weight, and homogeneity of the bullet. The fit in the barrel and the stability in flight both are thus affected. The kind and amount of powder, the density of loading and the amount of moisture absorbed by the powder are all contributing factors which result in changing the initial velocity.

#### EFFECT OF MOISTURE AND TEMPERATURE ON MUZZLE VELOCITY

While the cartridge case is supposed to be impervious to water and probably is if immersed for a short time, the fact remains that in the course of time moisture does get in. Whether from osmosis or some other mysterious reason, history does not say. Also, while the powder is supposed to be more or less non-hygrosopic, which means that it does not readily absorb moisture yet really it does to a certain extent. This, then, will affect its rate of burning and also, as a consequence, the pressure and velocity.

Moisture in the air has a tendency to make the bore lubricated and therefore decreases friction in the bore, with a consequent increase in velocity. The bullet will therefore strike high and less elevation will be required. This change is in addition to the change in the resistance of the air to the flight of the bullet.

An increase in temperature generally means an increase in the ability of the air to hold moisture and therefore the humidity is increased automatically, so to speak.

Service ammunition is loaded to have a muzzle velocity of 2700 feet per second when fired with the powder at a temperature of 70 degrees. This

velocity will vary directly with the temperature as each degree of change will cause a variation of about one and one-half feet per second per degree. However, even the best of ammunition has an unavoidable variation even under standard conditions. This variation in the case of the service cartridge is equal to 20 feet per second. Therefore, the muzzle velocity of this ammunition under various weather conditions in so far as temperature is concerned should be 2700 plus or minus the unavoidable 20 feet per second corrected by the change in temperature in degrees times one and one-half.

For example: The temperature is around 90 degrees and the ammunition variation is assumed to be the maximum. What is the muzzle velocity? 2700 plus 20 plus difference between 70 and 90: times  $1\frac{1}{2}$  equals 2700 plus 20 plus 30 or 2750 feet per second. Small variations in muzzle velocity have corresponding effects on vertical deviations at the target particularly at one thousand yards. Assuming a vertical deviation at this range of thirty inches, half will be caused by variations in velocity while half will be due to some of the other variations already enumerated. Sometimes of course one variable factor cancels another and the resulting group is remarkably good. Likewise sometimes the rifleman makes an error which would normally throw him out of the group but which error is counteracted by some bullet or ammunition variation acting in the opposite direction the net result of which is a center shot. Only in this case can we account for the fact that the rifle often produces vastly better groups than the rifle and its ammunitions can ordinarily be depended upon to surely give in the average of shooting.

The variations obtained through temperature changes do not necessarily affect a given group unless some of the cartridges are left in the sun but chiefly affect the elevation required for a given range. Likewise, the density of air makes considerable changes in elevation when firing is held on different days providing there is a considerable change in air pressure. The density of the air depends upon three variable factors, namely, pressure or barometer readings, temperature or thermometer readings, and dampness or hygrometer readings.

In spite of all this it is not recommended that the shooter equip himself with all these instruments. Although it is possible to have theoretical weather corrections not including wind effect for as much as ten minutes of angle at one thousand yards corresponding to a change of about one hundred yards in elevation yet so many of the factors cancel as has been noted, that a correction of over several minutes is rarely necessary. Otherwise the rifleman would be up against it as still neglecting the wind which is the biggest problem of the firer, there remains the other factors which cause the rifle to shoot high or low even on normal days. In other words there are variations without end. Fortunately all of them with the exception of wind can be neglected providing ordinary precautions are taken by the marksman to keep all the conditions for each shot as nearly alike wherever possible.



# The Stocking of Match Rifles

By Stephen Trask

**C**ONCLUSIONS relative to the stocking of match rifles which are of the greatest technical importance to the target shot have been published by the Match Rifle Experimental Committee of the British N. R. A.

Considering both the Mannlicher and the Mauser actions, the Committee, in its report appearing in the British N. R. A. Journal has contributed extensive proof of the soundness of theories which have been given serious thought by many riflemen in the United States during the past few months.

That the British Committee should have undertaken experiments along the same line, at this particular time is more than a coincidence. It can be taken as further proof, if such is needed, of the vital part proper stocking plays in increasing the accuracy of the match rifle; and, contrawise, the erratic shooting which may be expected of a rifle in which the bedding of the action in the stock has been regarded as of scant importance.

All of the findings of the British Match Committee are of interest, but its conclusions regarding the Mannlicher action cannot be considered of great moment to American riflemen since this is a type of action but little known in the United States among target shots. Its inclusion in the committee report, however, is logical, being traceable to the fact that the Mannlicher has been the leading action in English match rifles for many years, although it is understood that now there is a decided leaning toward the Mauser type action. In this country, however, the Mannlicher action is favored only by a few game shots.

The committee's findings concerning the Mauser action, however, strike very close to home and are of the greatest value and importance to our target shots, since the Springfield action is a modification of the Mauser and comments relative to the proper fitting of the Mauser apply with equal force.

The conclusions of the British respecting the fitting of the recoil are to be especially commended to the attention of the target shot in this country, as the shooting of the Springfield rifle can be to a larger degree affected by this one adjustment than by any other single factor. The fit of the action screws is also of the utmost importance.

The full report of the British committee follows:

**A**T the meeting of match rifle men at Bisley on July 11, 1923, it was asked that a memorandum on stocking match rifles be produced by

the Match Rifle Experimental Committee. This request was due to the troubles experienced by some match rifle men who found that the stocking of their rifles was faulty (and a cause of erratic shooting).

A match rifle differs from a military rifle in having the backsight fixed to the stock and not the body or action. Consequently, if there is any movement of the body of the action (into which the barrel is screwed) in relation to the stock, the zero of the rifle will change with every such movement. This change in zero may be vertical,

these reasons it is advisable to make certain that the barrel is nowhere in contact with the wood of the fore-end.

The essentials of sound stocking are thus:— (1) That the body of the action must be fixed in firm contact with the stock, and (2) that the barrel should be quite clear of contact with the wood of the fore-end.

To ensure these two essentials there are several points to observe. In the following notes the Mannlicher and Mauser actions will be discussed, but it will be a very simple matter to apply the principles dealt with to any other action.

## MANNLICHER ACTION

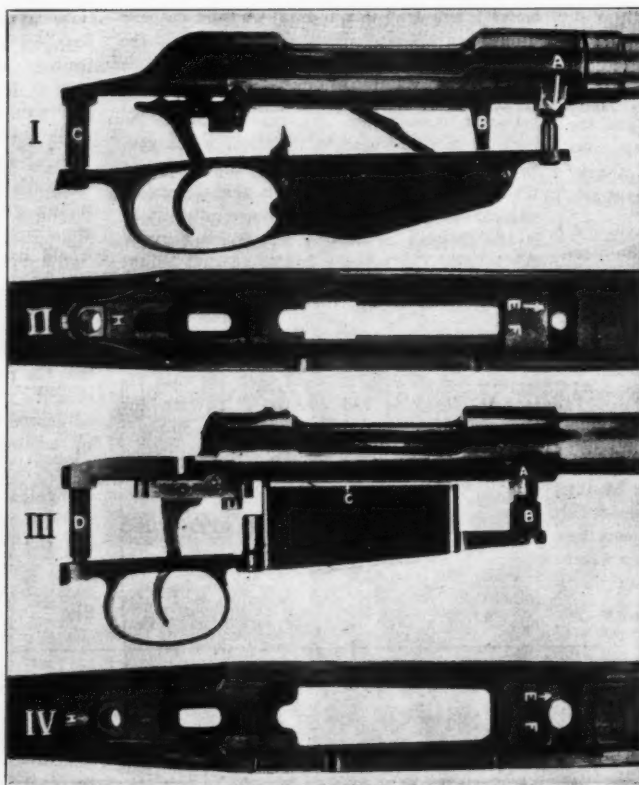
Fig. I is a photo of the body of the action with the trigger guards in position. The projection A receives the front action screw and its rear surface meets the recoil plate E of Fig. II (shown edgewise). This projection will be called the recoil abutment. The projection marked B will be called the magazine projection. The part marked C is a collar surrounding the back screw, which screws into the tongue of the body. Sometimes there is a collar for the front action screw, but this is not usual. Fig. II is a photo of the stock on which the body of the action fits. The recoil plate E has been mentioned. The surface marked F is curved to correspond with the body between A and B, and the surface H is flat, following the shape in front of the thickened end which receives the back action screw, and behind the rearward extension of the trigger.

The most satisfactory stocking is obtained when the only parts of the stock that are in close contact with the body of the action are the two surfaces F and H. The wood of the fore-end should be removed so that the barrel, throughout the whole of its length, is quite clear of it when the body is screwed tight in position.

This may be ascertained by passing a piece of paper between the barrel and the wood below it. This should be done with the foresight attached to the barrel horizontal, the rifle being supported on the wood of the fore-end, as in firing.

With use and the frequent tightening of the action screws, the wood forming the surfaces F and H gradually gives way, and therefore it is convenient to put on these surfaces a packing of stout brown paper which can be increased in thickness as may become necessary. Moreover, packing on these surfaces makes it unnecessary to remove much wood from the fore-end in or-

(Concluded on page 16)



TYPES OF RIFLE ACTION  
I and II Mannlicher, III and IV Mauser

or horizontal, or both, and will appear as if due to some variation in the bullet's flight affecting elevation, or to some variation in the strength of the wind. It is, therefore, absolutely essential for consistent shooting that no movement should be possible between the body of the action and the stock.

The effect of the normal vibration of a barrel on sighting is taken into account when the zero of the rifle is obtained, but if the normal vibration is disturbed by any influence, the zero will be affected. If the wood of the fore-end is in contact with the barrel, the pressure of this contact will vary with the temperature of the barrel, or with the moisture in the wood, causing a greater or less degree of warping. For



# Target Rifle Shooting in High Schools and Colleges

By Walter R. Stokes

## Part III

**F**RONT sights are of three common types: pin-head, blade, and aperture. Rear sights are of two common types: peep and open. The principle of the use of sights is as follows:

The shooter, with his right cheek against the comb of the stock, places his head in such a position that he can bring the front and rear sights into alignment; that is, in the same direct line of vision. He next takes care to look through the peep hole in the rear sight and to adjust the position of his head so that he is able to see the top of the front sight in the center of the circular peep space of the rear sight. It may be

It is always wondered by the beginner why he should hold underneath the bullseye instead of aiming directly at the center of it, where he wishes his bullet to strike. The reason for not holding in the center of the bullseye is this: the front sight appears black, and so does the bullseye; consequently if the front sight is held into the bullseye it blends with it and the center of the bullseye cannot be located. This means that it is an optical impossibility to have the front sight in precisely the same place on the target each time the rifle is fired, and as a result the hits will not group closely. But by aiming in

same direction in which the rear sight is moved; that is, for example, if the rear sight is moved to the right the bullet will strike the target farther to the right than formerly.

The reason for this is indicated as follows:

Let us say that we have been shooting the rifle and find our shots striking much too low. We raise the rear sight. Now, if we held the rifle in the same position as formerly we should have to raise our eye higher in order to see through the rear sight in its new position, and when we had aligned the sights we should find them lined up on a point below the bullseye. But what we actually do is the reverse of this: instead of keeping the rifle in its former position and raising our eye to the sight in its new position, we lower the butt of the rifle until the sights and bullseye line up in front of our eye at its original position. In other words, when we change the rear sight we do not thereafter change the position of our eye and of the original line of sighting, but change the position of the rifle so as to preserve unchanged the first line of sighting; this we normally do unconsciously. After the sight has been raised and we have lowered the rear portion of the rifle to bring the sight down to its original position, the muzzle of the rifle will point higher than at first and the next shot will strike higher than did the others, and in the center of the bullseye if the correct change has been made.

The same principle applies to lateral movement of the rear sight.

The greatest optical accuracy is obtainable with the aperture or ring front sight, and this type of sight is used by nearly all skilled target shots.

The open rear sight is not favored by leading riflemen, and is decidedly undesirable for indoor shooting by artificial light. Consequently little need here be said concerning it.

### THE SLING AND ITS USE

At this point the important parts and functions

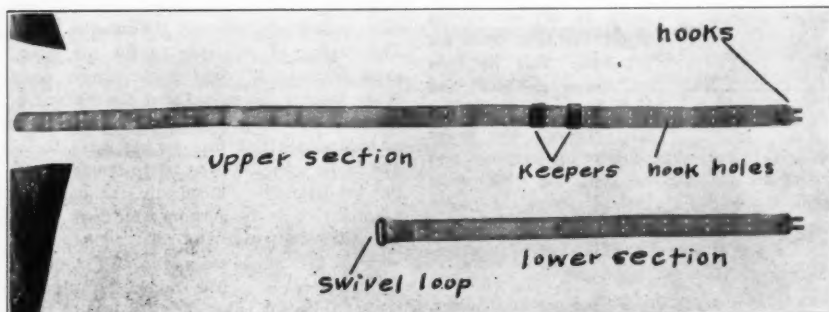


Fig. 9—Components of the Gun Sling

necessary for him to close his left eye to accomplish this comfortably. A right-handed shooter should aim with his right eye; if defects in vision force him to use his left eye, he should learn to shoot left handed. Retaining the alignment of the front and rear sights, the shooter brings the bullseye into alignment with them by altering the direction in which the rifle points until the bullseye appears just above the front sight, seeming to have its lower edge resting barely upon the top of the sight.

The aligning of the three points, rear sight, front sight, and bullseye, establishes a true straight line from shooter to bullseye, and since the barrel of the rifle is practically a straight line connecting two of the points (rear and front sights), it must point accurately at the third point (the bullseye). Briefly, the situation is that when an imaginary line connecting the rear and front sights is pointed at the bullseye, the barrel, being very close to it and practically parallel, points the same way.

In aiming it will be noticed that the peep hole appears very large—unduly large. But a personal experiment will quickly demonstrate that when the eye looks through any small opening close at hand a large area is seen and the hole appears large, also that the closer the hole is to the eye the larger will appear the hole and the area seen through it.

the manner here described, there is little optical difficulty in the way of placing the front sight in the same place on the target each time and obtaining the close grouping of hits which will result from doing so. As will presently be shown, the rear sight is adjustable, and although the aiming point is below the bullseye, there may easily be made rear sight corrections such that the bullet will strike in the center of the bullseye.

The rear sight on the Winchester Musket, as on all well-equipped modern rifles, may be moved up, down, or to either side, and the placement of hits upon the target changed accordingly. These changes may be accomplished by simply turning thumb-screws provided upon the rifle for the purpose. Graduated scales for both the lateral and vertical movements are furnished on the sight, so that changes may be made with mathematical exactness.

The principal rule to remember in the matter of sight adjustment is that the hit upon the target will vary in the



Fig. 10—Gun Sling Properly Assembled and Attached to Rifle



Fig. 11—Getting Into the Sling

of a rifle have been explained, so its actual handling in firing may be taken up. This must be begun by a discussion of the most important accessory of the rifle, the sling; its use will be taken up in combination with a discussion of firing in the prone position.

The sling generally used is the U. S. Army model. It consists of two parts, the lower and the upper slings. The lower sling is made up of a strip of tough leather, to one end of which is fastened a brass device with two hooks, and at the other end of which is fastened a brass swivel loop. The leather is pierced at intervals by sets of holes into which the hooks can be placed. The upper sling is of similar description, except that it has no swivel loop and is longer than the lower sling.

To assemble the sling the plain end of the upper section is passed through the swivel loop, with the rough side of each piece of the sling turned in the same direction. Two small leather bands known as "keepers" are then slipped over the hook end of the upper sling and the smooth end passed through them also, so that they contain two thicknesses of the upper sling. The sling is now assembled and ready to be placed on the rifle. To do this the plain end is passed through the upper swivel loop on the rifle, working from the under side of the swivel loop and with the finished side of the sling turned in toward the rifle. Next, the hooks of the upper sling are fastened in a pair of holes in the plain end. The lower piece of the sling is attached to the rifle by passing the hook end through the lower sling swivel loop and securing the hooks in a pair of the holes in the lower sling. This completes the attaching of the sling to the rifle. Considerable adjustment of the sling may be accomplished by changing the holes in which the hooks are set.

The sling has two valuable functions: it is employed to make carrying of the rifle easy and comfortable by slinging it over the shoulder, and it may be utilized to relieve the left arm of muscular strain in holding the rifle for shooting, thus becoming an aid to steady holding.

#### THE PRONE POSITION

The prone or lying-down position is the steadiest among the shooting positions, and the sling is of most value when used in connection with this position. Hence it is desirable to start a beginner in the prone position.

Before the shooter lies down to fire he should adjust the sling upon his left arm. This he does by passing the hand and arm, from the right hand side, through the lower

loop in the upper sling (below the keepers), and pushing his arm through until the sling passes around the back of his arm, above the biceps muscle. To hold the sling in this position he pulls the keepers down until the loop about his arm is close-fitting and tight.

The sling is now adjusted for use in shooting, except that it may have to be shortened or lengthened by changing the position of the hooks. This same adjustment of the sling is used in the kneeling and sitting positions, except that the upper loop may require shortening or lengthening.

After his sling has been adjusted the shooter brings his left hand and wrist around the left side of the sling, between sling and fore-end, and grasps the fore-end. In this position the sling fits smoothly across the back of his hand, because of the half-twist in it produced by his having originally put his hand in the sling from the right hand side.

#### THE PRONE POSITION AND PROCEDURE IN FIRING

With the slings and left hand properly in place, the shooter lies down flat on the ground. In his position on the ground his body should be inclined to the left of the direction of firing, at an angle of approximately 45 degrees. His legs should be straightened, with his feet a yard or more apart, heels turned in, flat. His left elbow should be resting on the ground directly under the rifle. His rifle should rest over the heel of his left palm, the hand relaxed, with the butt of the rifle resting on the ground under the right shoulder. The length of extension of the left hand under the fore-end depends upon the length of the shooter's arms, the long-armed shooter requiring a full extension, the short-armed shooter a lesser one. The heel of the right palm, hand opened, should rest upon the heel of the butt



Fig. 12—Adjusting It on the Arm

plate. All these points can be observed in the photographs below.

A very flat position is assumed in order to obtain as much support from the ground as possible, accordingly relieving the muscles of strain. The angling of the body to the left gives the most natural and comfortable aiming position. When the left elbow is placed directly under the rifle it has no tendency to slip, and the full strain of holding the rifle may be put upon the sling. The heel of the left palm is the strongest part of the hand and is consequently the portion best adapted to bear the pressure which will be placed upon the hand; also the rifle can be supported over the heel of the palm with all the muscles of the hand relaxed. The reason for placing the heel of the right palm upon the heel of the butt plate is this: when the shooter is ready to fire he pushes forward on the heel of the butt and raises it to its place in his shoulder, forcing it into the best position; thus managed, he gets the butt at his shoulder without strain or difficulty, but if he attempted to place it there with his right hand at the small of the stock he would have little leverage to overcome the resistance (due to the tight sling) which is involved in forcing the butt forward and up into the shoulder. If great difficulty is encountered in forcing the butt into its place at the shoulder the sling must be lengthened at the upper hook, so that the butt



Fig. 13—All Ready to Get Into Position

can be brought forward sufficiently to enable the shooter to place it at his shoulder; but the sling should always be so tight that the butt will go in place with some resistance. The necessity for this is based upon the fact that the effectiveness of the sling is dependent upon the creation of a system of supporting stresses, with the back of the left upper arm, the upper sling swivel, and the right shoulder at the stress points.

After the butt of the rifle has been placed at his shoulder the shooter grasps the small of the stock with his right hand, index finger outside the trigger guard. His right elbow rests firmly on the ground. He places his right cheek firmly against the stock, exerting a moderate pressure against it. This helps to steady the rifle. He aligns his sights in the manner previously explained, and attempts to bring the bullseye into alignment. To accomplish this he adjusts the position of his rifle by drawing in or sliding out his right elbow. Sliding the elbow out lowers the shoulder and the butt of the rifle with it; correspondingly, drawing the elbow in raises the shoulder and the butt of the rifle. The position of the rifle may also be changed by shifting the position of the left hand under the fore-end.

As soon as he has brought sights and bullseye into the proper alignment and has acquired a comfortable, steady position, the shooter is ready to fire. He momentarily pauses in his breathing, begins a gently but steadily increasing pressure upon the trigger with his index finger, finally getting the trigger off when the alignment of sights and bullseye appears just right. All jar or sudden movement must be avoided in getting the trigger off, for the aim would be greatly impaired thereby. A smooth get-off is obtained by squeezing not merely with the trigger finger, but with the whole hand.

As he fires his shot the beginner is almost certain to blink his eyes violently and suddenly to tense the muscles of his right shoulder. This is called "bucking" or "flinching."

When we know an explosion will instantly take place close to our face we instinctively shut our eyes to protect them against flying particles; and



Fig. 14—Getting the Rifle in Position for Firing

when an unavoidable blow is coming at our shoulder we instinctively tense it to meet the shock. This is the reason for the natural tendency of the shooter to flinch while firing his first shots. But obviously flinching destroys the effects of steady holding and is antagonistic to consistent accuracy. The beginner must be made to understand this very clearly, and must be told that flinching can be combated only by strong conscious effort upon his part to overcome the instinctive reactions which constitute flinching. He will be aided in this effort by constantly seeking to fix in his mind that the firing of the rifle

Now if the shooter has accurately noted that as his rifle was fired his sights appeared to be held just a little too high to make a center bullseye, but still a bullseye, he should say to himself, or to his coach, "A bullseye at twelve o'clock." If the shot looked also a bit to the right, he should say, "A bullseye at one o'clock." If the shot did not seem held closely enough to be a bullseye the shooter will attempt to state just what he thinks it will be; e. g., "A seven at one o'clock." But thus using the minds of others, the spot at which the shot should, and actually will if he has been accurate, appear. Accuracy in the matter depends

largely upon keeping steadily alert, continuing to watch the bullseye and sights at the instant the rifle is fired and the bullet takes its direction. Since a flincher cannot do this, an effort to "call" shots tends to discourage flinching.

The system of locating a hit which has been described in connection with "calling the shot,"

will be found always a useful and accurate means of describing the exact location of a hit on the target. Also it aids distinctly in the development of close holding and keen co-ordination in releasing the trigger.

At this point this procedure of firing in the prone position has been covered in considerable detail; a brief review is undertaken.

1. Adjust sling well up on arm, and place left hand between sling and fore-end from left side.
2. Take prone position, body 45 degrees, left elbow under rifle, heel of right palm on butt.
3. Force butt into shoulder.
4. Load (not before this time).
5. Adjust position to comfort, rifle resting over center of heel of left palm, left arm relaxed, cheek firmly against stock, all muscular tenseness avoided.
6. Align sights and bullseye.
7. Stop breathing.
8. Final focus on bullseye.
9. Squeeze off trigger, thinking against flinching.
10. Call shot.

All of the things described above in connection with firing in the prone position apply to firing in all the positions unless obviously not appropriate to the position in question.



Fig. 15—The Preliminary Prone Position

will really do him no harm, and that he cannot shoot accurately unless he remains inert and calm when the rifle goes off.

There is also a device known as "calling the shot," which will prove a valuable aid in overcoming flinching. This is worked out as follows: the target is imagined as being the face of a clock, twelve o'clock being at the top, three o'clock at the right, etc., with the center of the face corresponding to the center of the bullseye.



Fig. 16—All Set



# Shotguns, Powders and Cartridges

By Capt. Chas. Askins

## Part II—Powders

**M**OST of us reason in black powder terms. We knew all about black powder, or at least all the old timers did. Coarse grained black powder burned slower than fine grained, the bigger the bore of the gun the coarser the grain of the powder that should be used in it. Heavy powder charges required long barrels, for with short barrels some of the powder would be driven out at the muzzle unconsumed. The man who desired range and velocity, whatever his bore, knew that he must have a long barrel—this was a fixed fact and never questioned. If his barrels were short and he still desired to use a pretty heavy charge of powder, his recourse was to use a finer grained powder which would completely burn within the given length of barrel.

Black powder burns by the successive explosion of grains. When the primer flash reaches the adjacent grains of powder or those at the base of the load, the base grains begin to explode, and each grain as it explodes communicates fire to those next to it. When fire reaches a grain of black powder it is gone in an instant, with an explosion, all its gas being liberated. When the base of the charge begins to burn and explode its gasses start the charge, including the upper section of the powder charge, on up the barrel; the burning continues on up the barrel, and if there is enough powder and the bore is narrow enough not all the powder may be consumed when the muzzle is reached. It is the most remarkable and the best powder ever made in some respects, for its burning rate is very little affected by breech pressure. Put a heavy or a light load for black powder to push out, and it goes about the business consistently, in the same old way, burning in about the usual barrel length. Put this propellant in the gun without any shot charge above it, and it will still burn pretty well though simply confined by the wads. Indeed a pile of black powder, unconfined, if it happens to be set fire, will play havoc with the surrounding country, for it will burn with violence simply under atmospheric pressure. On the other-hand nitro powder under the same circumstance would burn up like a pile of very fine kindling, with a good deal of fire but little noise or action.

Smokeless powder does not burn by the successive explosion of grains, but the powerful primer runs a flame through the entire load at the same time. All of the charge starts to burn, throwing off gas enough to start the shot charge, and the powder moves up the barrel still burning. If there is a lot of powder in the charge it makes a hotter fire and is burned up more quickly. The more nitro powder you put in a shell, other things being equal, the quicker it is all consumed. Keep that in mind; a big charge of powder requires less barrel length and less barrel room than does a small charge (of smokeless powder).

In the beginning, when smokeless or nitro shotgun powders were being developed, American Wood Powder in this country and Schultze in Europe, a problem was found in getting the powders to burn with sufficient rapidity to develop their full force. The main trouble was with the primers, these being the same used with black powder. The primer failed to deliver a hot enough flash to fully set the powder to burning, and it was common at one time to place a pinch of fine grained black powder in the bottom of the shell by way of reinforcing the primer flash. The primer problem was soon solved by the invention of smokeless primers, and thereafter good results were secured with the new nitro compounds.

By and by powders were quickened; the grains were hardened so that wad pressure had less effect; other powders were invented, including dense smokeless with its high shell base; and greater care was given to wadding, to wad pressures, to crimp, and to the size of the load. At last such excellent results were secured that shooters have been fairly content with their ammunition for more than a quarter of a century, during which time shot cartridges have changed very little. Now and then some shooting man of an experimental turn has developed loads of his own, something different from what factories furnished. Some of these experimental loads were good, some bad—mostly bad, for the experimenters were working without that exact knowledge of powders necessary to full success. In any event, the factories have fairly exhausted the possibilities of present shotgun powders, and little is to be learned that factory experts do not already know.

As one smokeless powder after another was invented for shotguns and rifles, such compounds were given careful study, not only by the powder makers but by those who furnished ammunition. It was early discovered that the burning rate and breech pressure of a nitro compound would not take care of itself, as was true of black powder, but that the burning rate absolutely depended on the resistance. Resistance may be defined as the work the powder gas has to do in order to free itself from confinement. If the resistance is too light the load will be pushed out without developing the strength of the powder, just as a man can lift a pound weight with one finger without bringing into play the muscles of his arm. Lacking resistance, smokeless powder is wasted, its strength not being used. Unburned or partly burned powder is wasted energy, and powder without resistance—black powder always excepted.

In a shotgun the resistance factors are found to be the shot charge, the wadding, the primer, the quantity of powder, the crimp, the cone, the bore with its consequent powder room, the choke, and the fit of the shell in its chamber as affecting

its expansion, the length of the case, and there are other minor factors. Hygrometer, barometer, and thermometer conditions also have an effect, and may be considered as belonging to the resistance factors.

In all guns, at all velocities, the idea of the powder maker is to get the highest possible velocity at the lowest possible breech pressure. In order to accomplish this the powder should not burn too fast, but in an ideal powder should continue to burn and to throw off gas in increasing quantities nearly to the muzzle, pushing the load faster and faster quite to the muzzle. The powder which exhausts its strength before the load of shot is half way to the muzzle is not the powder that any one would select from choice. Powders are a fixed fact, of very great uniformity, made and blended with the utmost care so that batch after batch will possess the same strength and the same burning properties, yet, notwithstanding, one charge will burn and exhaust its strength in half the barrel length, and another charge of exactly the same powder will throw particles out at the muzzle unconsumed. The fault is not in the powder but in the way it is treated.

In order to fully understand the nature of smokeless powders in general we will have to take up and briefly mention rifle powders, for the rifle compounds have reached a stage of development far beyond the possibilities of any shotgun powder now made. The rifleman has not been content with anything he had; is not content with anything he has yet. This notwithstanding his velocities have increased from fifteen hundred to better than three thousand feet, his range from eight hundred to over fifteen hundred yards, with accuracy beyond comparison with the results of the past.

Keep consistently in mind that every grain of a charge of smokeless powder begins to burn at about the same time, continuing to burn as it is driven up the bore by the powder gas. As it moves up the bore the unconsumed portion of the grain will burn with less rapidity for two reasons; the grain is becoming smaller and hence presents less surface to the flame, and the pressure is lowering and with it the heat. The problem of the powder maker being to keep up the pressure and the burning rate, he has partly solved it by the invention of progressive burning powders. These are made with a rather large cylindrical grain, having a perforation through the center. This grain not only burns on the outside, but in the center as well; as the hole in the center of the grain burns it becomes larger and we thus have more and more surface exposed to the flame. Gas pressure is thus maintained to the largest possible degree, and we have a low



breech pressure with a comparatively high muzzle pressure.

As the charge moves up the barrel more and more space will be left for the powder gas to fill, and as a consequence pressures must drop; the burning rate will drop with the pressure, for pressure and heat are here synonymous terms. It is thus to be seen that maintaining anything like the breech pressure to the muzzle is impossible, and all that can be done is to sustain the pressure curve to the fullest possible extent. Here is the principle which applies to all powders and to all guns: The smaller the bore, the less the gas room, the higher the pressure, the quicker the powder is consumed. We therefore have the apparent anomaly of the small bore gun using the largest grained and slowest burning powders that have been invented. The powders which have been found best adapted to such guns as the 280 Ross and the 256 Newton may not be so well adapted to any other gun. Reasoning from such a basis it might be concluded that the powder best adapted to a twenty bore would not be exactly the powder for a twelve bore. Perhaps such conclusion is correct.

Black powder was used indifferently in rifle or shotgun; it was all the same to the good old black stuff wherever they placed it. No doubt at one time it was thought that smokeless powders could be used in the same way. I can remember when sporting papers and magazines contained instructive articles on the use of Wood Powder, Schultze, S. S. or some other kind of shotgun powder in rifles. I tried it along with others, finding I could get fair results out of the 32-20-100, but when I tried a 32-40 with a full charge of Schultze, the gun kicked like a horse and it took me two weeks to get the lead out of the bore. I didn't know the reason at that time—merely knew that such a powder would not work in a rifle except in reduced charges. Subsequently, I tried a rifle smokeless in a shotgun and that didn't work either. What I didn't know anything about was two important factors, Resistance and Burning Pressures. When I had learned the secret of why shotgun powder wouldn't work in the rifle and why the rifle powder wouldn't work in the shotgun, I knew something about smokeless powders.

Not only will a shotgun powder not work in rifles beyond the lightest charges, but rifles differ among themselves and the rifle powder that is correct for one cartridge may not be at all suitable for some other cartridge. Powder makers soon learned that it was best to specialize, a certain powder for a certain cartridge or for a class of closely related cartridges. The separation into classes is marked by the pressure which a certain amount of lead, at a given velocity, from a given bore will develop. Powders in composition and in grain were given a burning rate in accord with the known or calculated pressure. We thus have certain rifles that might be termed fifty-five thousand pound pressure weapons, and the powder made for such arms is a fifty-five thousand pound pressure powder—that is, it is regulated to burn and to produce an even pressure, with normal burning and a high velocity when the

breech pressure is fifty-five thousand pounds. At a pressure of forty thousand pounds such a powder might be found practically useless. Another gun and cartridge produced a pressure of fifty thousand pounds, and a special powder was made for that cartridge. Yet another powder would be made for a forty thousand pound pressure arm, another for a thirty-five thousand pound gun, for a twenty thousand pound piece and so on. Hence we find our powder manufacturers making such powders as number 10 for the highest pressure weapons made in the shape of a rifle, the .256, .280 and guns of the small bore, heavy bullet, high velocity class. A trifle faster powder is intended for such weapons as the Springfield 150 grain, the Mauser 154 and so on. Another powder is intended to afford a very high velocity with a very light bullet, and we find this powder used in the 250 Savage with its 87 grain ball. It is not worth while to go into all these different powders or the cartridges in which they are used, but the principle should be fixed that there is a special powder for a special pressure, and that powder being perfectly regulated to the pressure will do better than any other powder.

Every powder is, however, more or less flexible. Flexibility means the maximum and minimum pressures under which the powder will burn and behave normally. For example, a fifty thousand pound pressure powder might burn and do its work well under a pressure anywhere between forty-five and sixty thousand pounds. Du Pont number 16 rifle powder is noted for its flexibility, and can therefore be used to advantage in a great many rifles of varying pressures.

Pressures in the rifle can be governed directly by the weight of the bullet; they can be governed with like certainty by the weight of the powder charge. If a certain bullet with a given charge of powder is showing too much pressure, with a consequent too rapid rate of burning, the rate can be lessened and the pressure reduced by a lighter missile. There flexibility comes to our aid, for our powder which permitted the high pressure might burn at a lower pressure and still afford good, even velocities. Nevertheless, the best results are obtained when the powder, in its nature and its quantity, is exactly adapted to the bore, the velocity, and the bullet. Hence the wisdom of the advice given by the powder makers to use a certain powder for a certain cartridge, and just so many grains of that powder. The powder manufacturers have done our experimenting for us, and we need not assume that we are going to learn anything that they don't know.

The tendency in powder making, as we have noted, is to specialize. The subject will bear a bit of repetition. Black powder behaved well in any old gun in which it was placed, though it was never adapted to high velocities; smokeless powder is on its best behavior only when used in the special gun and special cartridge for which that powder was developed. It is difficult to dangerously over-load black powder because it won't all burn, but the more smokeless powder we place in a shell the shorter the time in which it will all be consumed. A gunmaker may design an arm for a certain bore, for a certain weight of bullet,

for a certain quantity of powder, barrel to have a certain length, say twenty-four inches, and he is calculating for a velocity of three thousand feet. When he comes to try his cartridge he may find that his powder is not being entirely consumed in that length of barrel. Being unwilling to lengthen his barrel, one of several courses is open to him. He can increase his powder charge a grain or two, whereupon it will all burn clean, or he can increase his bullet weights a trifle whereupon the powder will all be consumed, or he can use a quicker burning and lower pressure powder.

The cartridge designer has every factor under his control except that of his own volition and for his own purposes he fixes limitations. For example he may select a barrel which is safe under a pressure of sixty thousand pounds to the square inch, but this must not be exceeded. It follows that he has pressure limitations within which he must work. He may have selected a certain weight of missile as best adapted to accuracy, range, and velocity in that bore, and this bullet he is unwilling to change. He may have decided upon a velocity of three thousand feet, and this he is unwilling to change. He may have fixed his barrel length as so many inches, perhaps for the sake of handiness, and he is unwilling to change the length of his tube. Now he has bore, bullet weight, velocity, breech pressure, barrel length—all of which he is unwilling to change, and all that is left him to work with is his powder. He may find that with a certain powder he cannot reach his muzzle velocity without exceeding his pressure limits or lightening his missile; with some other powder he can reach it, and that is his powder. Of course, the lower the breech pressure for the required velocity the better he likes the powder, since no one is deliberately searching for breech pressure. The result is a very close specialization of powder to cartridge, and the powder selected is to be used within very narrow limits as to maximum and minimum charges.

The powders which afford the highest velocities in comparison with the breech pressure are the progressive burning compounds, since they start the load gently, and continue to burn at a high rate well toward the muzzle. Burning at a *high rate* is the secret of these powders, for other powders can be had which will continue to burn all the way to the muzzle. The difference is that one powder might develop a breech pressure of 50,000 pounds, but a muzzle pressure of only five thousand pounds; on the contrary a progressive burning powder might show a breech pressure of but forty-five thousand pounds while the muzzle pressure would be ten thousand pounds. The latter powder would be superior, in that the breech pressure was lower and the velocity higher. It is to be understood that the figures given are to be taken merely as a matter of comparison—not the actual figures for any load or any powder. Progressive powders are therefore demanded when an ultra-high velocity load is called for.

Next issue we shall see what can be done with a progressive burning powder in a shotgun.



# Walter's Uncle Jim

by Carl Elmo Freeman

WALTER J. WATRUS took great pride in telling about his uncle that had been sheriff back home for two years and never owned a pistol. To hear Walter talk you would get the idea that his Uncle Jim subdued the bad *hombres* with his powerful eye—or maybe with his mighty right and a pair of brass knuckles. Or, if you have a wide acquaintance among sheriffs you might gather the impression that Walter's Uncle Jim did all of his officiating by proxy and had a good deputy, and saved all his own energy to use during court week to keep his chair tilted back at the proper angle against the wall of the courtroom. You've known sheriffs like that.

The first Lon Ferguson heard of Walter's Uncle Jim, was when our sheriff, Stone Davis, waltzed out and collected Pancho Gomez who had held up a small store, beat Old Man Ettling, the storekeeper, over the head with his automatic and left him for dead.

Of course we all make mistakes and Pancho made the mistake of not killing Ettling dead. Because Ettling came to, staggered to the door and called for help. He retained a mental picture of his assailant and when Stone got there he gave Stone a very good description before he collapsed.

Stone trailed Pancho back in the east part of town where the would-be murderer had left his horse. Stone saddled up, took the trail and followed his man back into the breaks of the Capitanians.

From the low hill, Pancho saw Stone on his trail and stopped in a wide canyon. There, he tied his horse behind an oak thicket and took a pot shot at Stone from behind a bush. That was another mistake Pancho made. A bush affords concealment but little protection against gun fire. Stone whipped out his sixshooter and squirted three slugs into the bush and Pancho slumped out to one side.

When Stone came in with his prisoner, Pancho was not in the best of health. He partook of spoon victuals for a few days and then quit cold. It was then that Walter began to enlighten Lon on pistols, sixshooters and pocket guns.

"The idea that a peace officer cannot make an arrest without mortally wounding the man with a sixshooter! It's preposterous!" said Walter. "Why, my Uncle Jim was sheriff two years and never owned a gun."

Copyrighted 1923 by Carl Elmo Freeman.

"How many arrests did he make in that time?" asked Lon, quietly.

"I don't know, but all that were necessary."

"Ye-ah, I reckon," drawled Lon. "How many deputies did he have?"

"Three, I think," said Walter. "One, Joe Thurman, was killed making a bootleg raid and George Faltner was shot thru the lungs arresting a dope peddler—"

"And your Uncle Jimmy didn't get a scratch?"

"No, he was notifying jurors when they raided the pool hall, and was conducting a sheriff's sale when George was shot."

"I see," nodded Lon. "That's why he wasn't re-elected."

Walter did not seem to notice Lon's remark, or possibly considered it irrelevant.

"Stone Davis has been our sheriff four terms," went on Lon. "An' our state has swung back and forth between both political parties twice in that time. Stone don't pester himself about sheriff's sales, notifyin' jurors an' sich. He's brought in several killers and had to shoot it out with three. Usually if he wants any of us local fellers an' we find it out, we jus' come in so he won't be bothered comin' after us."

"Well, in that case, then, he could arrest you without a gun—"

"Ye-ah, in that case. But—"

"And you carry a sixshooter most of the time, and yet you say that an unarmed officer could arrest you without very much trouble."

"This business of totting a gun should be suppressed."

"Well, we don't pack a gun to resist arrest, or intimidate our neighbors."

"What good does it do you to own a gun then?" asked Walter, with an air of "Now what are you going to say."

"Well, the Bible tells us that not even Christ could hand-pick a dozen men without gettin' one skunk among 'em, an' that we ought to turn the other cheek an' so on. But, who wants to turn the other cheek to a skunk? You see, if Old Man Ettling had had a gun that skunk of a Pancho would have thought twice before he tackled him."

"Quite so," Walter still had the air of "Now I got you," about him. "And if Ettling had been armed, Pancho would have shot him to death!"

"Maybe not. Pancho didn't want to shoot for fear of attracting attention. Ettling would not have had that fear—in fact he would have welcomed some attention along about then. As it is, the Old Man has just barely escaped death, an' may not think clear from now on. They had to trephine his head and raise the bone off his thinkin' apparatus. He'd much rather have been shot some'eres than have his skull mashed in!"

"All the same I think we ought to have a law against possessing firearms. This business of tot-

ing a gun should be suppressed. Why, Uncle Jim was sheriff for two years and never—"

"Ye-ah, you said that before—but you didn't say how much good he was to the county"

**A** FEW days later there was a rumpus in the pool hall between two young small-town toughs. Pug Williams was all lined up to make a bank shot on the eight ball when Pink Jones ran into his elbow and spoiled the play. When things quieted down Pug was on the floor with a fractured skull resulting from a blow from a billiard cue. Pug's vicious little pistol had hung in his hip pocket or Pink might have been killed and the poolhall man would have had to mop out. But, as it was, Pink came clear on a plain case of self defence.

This gave Walter a chance to remark some more on guns and things. He caught Lon Ferguson in the barber shop and began to air his ideas.

"There's a sample of what a gun-man gets. Pink Jones didn't need a gun to defend himself from that gun totter."

"No, I reckon not," said Lon, digging some lather out of his ear. "Most any of us would rather have a billiard cue than a pocket gun in a close place. That's why pocket guns ain't sold in these parts. They are a snare and a delusion. If Pug had shot Pink with the thing Pink would've had to prove it . . . Hell! He may have shot Pink at that, an' Pink aint found it out yet—but I guess not. Nobody heard any shot."

"Well," said Walter, "There ought to be a law against possessing firearms except under certain conditions. The police, plain clothes men and the like ought to have guns, perhaps, but my Uncle Jim was sheriff for two years without even owning a—"

"But he wasn't re-elected was he?" asked Lon. "I think we talked about Uncle Jimmy before. And besides," Lon became serious, "if we are goin' to be a nation that depends upon a small standin' army, just a nucleus to build to in an emergency from the citizens, we'd better let the folks own and get familiar with fire arms. Why, there ain't a day passes that some guy ain't killed with a chunk of lead pipe, or a sock with a rock in it. So we might as well pass a law prohibitin' folk ownin' socks an' makin' lead pipes, an' have all the rocks to the sea and dump 'em—"

"Yes, but if guns were prohibited there would not be so many holdups, robberies and the like," protested Walter.

"Possibly not. Especially not so many robberies wherein the robber gets killed, or the hold-up leaves a bloody trail for the officers to follow and such like. Lots of officers ain't got bloodhounds to trail a thug with and they have to depend on the spots of blood—especially on pavement where his tracks don't show."

"But look at the mail robberies—jewel thieves—bank robberies, where they get away without a scratch and are never caught!"

"Ye-ah, look at 'em—an' think—jus' think!" Lon paid his score, turned his collar right side out and reached for his hat. "If each mailman was armed with a good gun and taught how to use it and which end to point at a feller an' where the trigger was an' so on, they might take a chance defendin' the mails. Most bank em-

ployees and jeweler's clerks don't know what a gun's for! An' it's jus' the joints where it's known no guns are kept that are held up. Whoever heard of a hold-up in a hardware store or a sporting goods house? . . . An' you could law till you were black in the face an' only the law abidin' citizens would pay any attention. An embargo on guns would be just as hard to enforce as the embargo on booze is, or even dope—an' I can get a shot of either on Broadway or on Main Street."

Lon went out and Walter told the barber to "trim it up around the edges."

**T**HEN, in a week or two Walter hired a new girl as housemaid. She came up from El Paso, and when she was unpacking her imitation leather suit-case, Mrs. Watrus saw she had a cheap nickle-plated gun in it. Mrs. Watrus told Walter and they informed the maid that such a thing was not

going to stay in their house—that she didn't need a gun—and then Walter told her all about his Uncle Jim that was sheriff for two years and

didn't own a gun, and that she must get rid of the thing at once if not sooner. So she gave it to Johnnie Combs, a man living next door.

Johnnie put the gun in his pocket,



— there was a stab of flame from his stumbling form,—

forgot it until he was cranking his flivver. The flivver back-fired, the crank whirled out of his hand, broke his wrist, struck the pocket and the gun went off, shooting Johnnie in the hip.

That gave Walter another example to illustrate the fallacy of permitting folks to own guns. He laid for Lon Ferguson, and caught him in the drug store.

"Now," said Walter, "there's another sample of what a pistol can do to a man. And it could

(Continued on page 16)





## The American Rifleman

### EDITORS

BRIG. GEN. FRED H. PHILLIPS, Jr.  
KENDRICK SCOFIELD

T. G. SAMWORTH

ART EDITOR: CHARLES DUNN

Published semi-monthly on the first and fifteenth days at  
1108 Woodward Bldg., Washington, D. C.

Entered as second class matter, April 1, 1908, at the postoffice at  
Washington, D. C., under act of Congress of March 3, 1879.  
Obtainable by subscription, \$3.00 per year. \$2.00 to indi-  
viduals or members of clubs affiliated with the N. R. A.  
Canadian Subscription, \$3.50. Foreign, \$4.25

**L**OOKING back over the records of five years past having to do with ammunition tests, one cannot but be impressed with the steady shrinkage in mean radius figures for National Match cartridges of Frankford Arsenal manufacture. Comparisons between ammunition performances for different years are apt to mean little from a scientific standpoint. Not only do testing methods frequently change but weather conditions, which of course affect dispersion, are radically different. Yet it may be permissible to accept such a comparison purely as a standard indicating the progress which has been made by the Ordnance Department in ammunition production.

Between the years 1908 and 1919, little attention need be paid the records, since there is no possible basis for a comparison which would mean anything. The first two years of this period saw the firing of 7-shot, instead of 10-shot, strings with cartridges which were inherently prone to give a maximum of metal fouling. Nor do the following eight years do more than mark the establishment of a system for the purpose of selecting the best possible ball cartridges available either from government or ammunition company sources.

But coming to the year 1919, when after a hiatus of several seasons, ammunition testing was resumed as a recognized preliminary to National Matches and when serious attention began to be paid to the production by the government of cartridges which would show true match accuracy, it is recorded that both shooters and ammunition experts regarded that year's mean radius figures of 9.65 inches at 1,000 yards (average group diameter 30.32 inches) as a signal achievement, considering the ammunition in question was a machine product.

The year following, 1920, saw the adoption of the Mann barrel rest and but little change in the 1,000 yard radius figures. In fact the 170 grain bullet which that year won the test recorded a mean radius at the long range of 9.99 inches.

The first real shrinkage in the long range mean radius came

in 1921, when the winning lot (decided on the mean error system) recorded 8.62 inches at 1,000 yards. This was the "Tin Can" load.

The coming of the 6-degree boat tail, and the abandonment of the tin component in the powder in favor of a gilding metal jacket in 1922 registered another radius shrinkage with 7.22 inches at 1,000 yards.

And now the 1923 tests have upset all precedent by registering with the new 10-degree boat tail, a mean radius at 1,000 yards of 5.685 inches and an average group diameter for that range of 18.11 inches.

Comparing the 1919 with the 1923 results shows a shrinkage in mean radius of practically four inches and in group diameter of 12.21 inches, which incidentally is close enough to the difference between the diameters of the 5-ring, which was used in 1909, and the V-ring now in use, on the C target, to give these comparative figures some significance greater than coincidence.

During this period of time, the accuracy standard of commercial loading companies has also kept pace, but the figures for National Match ammunition, which is a machine loaded quantity product are being specially considered here.

Will the next five years see as great an accuracy increase in machine loaded ammunition as have the past half decade? That there will be produced more accurate ammunition than the 1923 National Match type seems a foregone conclusion. But that such radical shrinkages will be evidenced seems improbable. Frankford Arsenal has already produced cartridges keeping within less than two minutes of angle as against the three minutes registered in 1919 but since this has been achieved, every fraction cut from the remaining 1.8 minutes of angle may be considered distinct and significant gains.

Frankford Arsenal is to be credited with having developed a manufacturing process which has made this possible, for without the most advanced methods of production, the loading specifications and new bullet designs might have been ignominious failures.





# "WHAT IS THE MEANING OF 'CONSTITUTIONAL RIGHTS?'"

By Ames A. Castle

Policeman Dies From Gangster's Shots

**TRANSFUSE BLOOD IN VAIN**

White Members of Force Try to Help Colleague—Other Near Death.

Despite the fact that two white policemen, Robert Carroll and J. Edgar Hoover, submitted to blood transfusions, but failed to save the life of the policeman, John W. F. Carroll, who was shot by a gangster, the police department today announced that the transfusions were in vain.

PRICE 2 CENTS

**GIRL BANDIT AIDS IN \$2504 STORE ROBBERY**

**STYLISHLY DRESSED MEN HOLD UP NIGHT LOBBY—LEAVE \$46,000 UNTOUCHED**

Two men, at the point of revolvers, snatched a \$2,504 payroll from Miss Marie Kelly, cashier for Montgomery Ward & Co., in the lobby of the firm's building at 809 Third Avenue and Twenty-fifth Street.

Twenty-first street, the men and escaped. They guard on the elevator operator's way. The two men. One of the robbers, who was shot, was taken to the hospital, but the police are unable to find him.

**BANDITS GET \$2,200 PAYROLL FROM GIRL CASHIER AND GUARD**

Holdup Staged at Montgomery Ward & Co. Employees Are Entering Building at Sixth Avenue and Twenty-fifth Street.

Two men, at the point of revolvers, snatched a \$2,200 payroll from Miss Marie Kelly, cashier for Montgomery Ward & Co., in the lobby of the firm's building at 809 Third Avenue and Twenty-fifth Street.

Twenty-first street, the men and escaped. They guard on the elevator operator's way. The two men. One of the robbers, who was shot, was taken to the hospital, but the police are unable to find him.

**ROBBERS TAKE \$1000 PAYROLL ON BROADWAY**

Pickel Marble & Granite Co. Is Victim of Early Morning Holdup.

Three Bandits Stop Bank Manager in Act of Filling Envelope.

**WOMAN'S SCREAMS ROUT BANDIT PAIR**

Dr. Z. J. Giffels Slipped in Broadway Office—Huge Sum on Hand.

The screams of Mrs. M. Giffels, who was in the office of Dr. Z. J. Giffels, 100 Broadway, when she saw two men enter the office, and one of them, who was armed with a revolver, pointed the weapon at her. She screamed and the men fled.

**Lockhart, Bank Bandit, Rescued from Jail by Five Armed Men**

Had Been Captured Last Thursday After Flirting from Prison.

**PENER HELPS GATHER LOOT AS MEN TIE UP OWNER**

Young Woman Also Acts as 'Lookout' in Escape of Two Companions After Holdup at 1519 Market Street.

**3 SLAIN AS ROBBERS WRECK MAIL CAR IN TUNNEL**

MORE than a century ago, Congress decided that certain of the privileges of our private citizens had been overlooked in the original Constitution of the United States, and to protect these privileges a session, at which the necessary more than two-thirds of the votes cast were in favor of the move, was called to adopt certain amendments to the original document. The second article of this list of amendments, perhaps placed in that position because of its relative importance, read as follows: "A well-regulated militia being essential to the welfare of a free state, the right of the people to keep and bear arms shall not be infringed."

Whatever the other failings of the early lawmakers of this republic, they were precise and pointed in their speech. "The right of the people to keep and bare arms shall not be infringed!" The meaning of this sentence is as clear as the "Keep off" sign on the grassy spots in our city parks. It is as easily understood as the caution of a mother to her child. The protection of the home was thus assured; and this privilege of personal protection played a great part in the subsequent upbuilding of the vast expanse of semi-uncivilized western country, and the preservation of law and order in those sections already settled. The Constitutional right of each and every law-abiding citizen permitted him to keep and bear arms, protecting his life and property according to the laws of the state and nation. The value of this amendment soon became apparent.

Almost a century passed with this article unaffected. Then came the beginning of organized banditry, the thug and gangster of the city.

In the meantime, our cities had produced a type of American hitherto unknown. Perhaps it was imported in the great influx of foreigners who flocked from every European country to our shores; it may be that it was born and developed within our midst. But whatever the source of origin, this type increased with such rapidity that within a few years it became a dominating factor.

The new type was the opposite to the sturdy strain that had developed the wilds of the new country; it was in no manner related to the iron-willed men who had established the first semblance of law and order in a virgin wilderness. The new type was soft; it talked much and accomplished little that was of benefit to the nation. As it spread like a disease through the cities it began to control the votes of towns and districts. Its ambition was to change the old order of established law; to create an Utopia in a world infested with lawlessness.

It was with the growing dominating influence of this type that the old order changed. City ordinances and state laws were changed by this fanatical faction. New laws, numberless in their volume, were enacted. Some—in fact, many—of these new laws were in conflict with one another; some were unconstitutional.

With this came the custom of "testing" the new rules which were bound like a net about

**AFTER VICTORY BANDITS SHOOT DOWN CREW AND MAKE ESCAPE**

Explosion Ignites Southern Pacific Coach and Amount of Loot Is Not Determined—Posse Starts in Pursuit of Daring Hold-up Men Near Oregon-California Line.

SAN FRANCISCO, CAL., October 31.—Three members of the crew of Southern Pacific train No. 12, Portland to San Francisco, were shot and killed and the rest of the crew were injured by a band of hold-up men who were attacking the train near the Oregon-California line.

**DOWNTOWN HOTEL HELD UP AT 7:30 A.M.; 2 MEN GET \$1623**

Two Men Gunmen, One Man and Clerk at Market Hotel, 618 Pine Street, Forced to Go to Basement in Freight Elevator, Operated by Charles Hugo Vidler.

PART OF LOOT GUESTS MONEY

Struck on Head With Pipe By Robber and One Jaw With Revolver—His Boys Who Can Identify Kidnap Pair.

the citizens. Those thought to be in conflict with the Constitution were carried to the Supreme Court of the United States, to be passed upon by a judicial body. Some were established, others declared in conflict with the Constitution.

The decision of this Supreme Court was final. In it was vested the authority to "interpret" the Constitution as it saw fit. Certain sections of the Constitution were discovered to contain "elastic" clauses. Others had apparently been left to the judgment of the districts which they affected.

Thus we find Article II of the first Amendment being tampered with. First, a city passed an ordinance prohibiting the carrying of weapons. A test case was instituted. The Supreme Court ruled that the ordinance was in conflict with the Constitution.

Then state legislatures got busy. If the carrying of weapons could not be restricted, it could

be made so uncomfortable that the average citizen would not care to indulge in this practice. Laws prohibiting the carrying of concealed weapons were passed and upheld by the Supreme Court. A Constitutional Right of the citizen was being removed, but, so the jurists argued, it was for the common good. Thugs and gangsters had stood on their Constitutional Rights and insisted upon carrying weapons. The law-makers took the shortest way out, they restricted the right of possession of concealed weapons to the police forces and other law-enforcing agencies. No law-abiding citizen, they knew, would care to go about carrying a revolver in plain view, and where it may be the cause of an accident.

But the thug continued to carry his pistol or revolver in concealment. The passing of these restricting laws only aided the lawless.

All this was the result of the unexplained necessity of "interpreting" an apparently clear Constitution. Were this document written in ancient Greek, Latin or Arabic the necessity of interpretation would be obvious. But why should we find it necessary to hire men to interpret our own language for the benefit of the public? Webster clearly explains the definition of "infringement," yet our jurists are of the opinion that the restriction placed on carrying weapons is not infringing the rights of the people. Webster, then, was apparently wrong.

This interpretation of laws has been a boon to the lawless. It has also given birth to and nurtured the shyster lawyer, right-hand man and protector of the thug. Instead of producing an Utopia, as originally intended, it has developed a haven of refuge for the lawless. It has deprived the people of a Constitutional Right, according to the plain English meaning of the original wording. And it is high time that this condition be remedied.

I do not claim the qualification to make such a statement, regardless of the opportunity I have had for studying these conditions. Rather would I quote one who has been personally connected with law enforcement in one of our leading metropolises, Lawrence McDaniel, former circuit attorney of St. Louis, with whom I first became acquainted when serving on the staff of a newspaper in that city.

When detailed by the newspaper to "cover" the city's Municipal Courts, I was told to "watch" McDaniel. The meaning of this can be understood when it is known that the newspaper with which I was connected was championing a political faction opposite to that to which McDaniel belonged.

In "watching" him, I learned that he was not only doing all in his power to bring the lawless to justice, but that he was hampered by the ease with which criminals defied justice. Alibis could be produced to overcome the best state's witnesses; a thug could shoot his victim, throw his gun upon the sidewalk or hand it to the policeman who arrested him, and evade the concealed weapons law, plead self-defense and beat the whole nine counts which the grand jury

returned against him; a party of hold-up men, carrying on their work in an automobile, could lay their guns on the seat of the car before the police apprehended them, and "Larry" as McDaniel was known to members of the press, was powerless.

Larry's troubles did not stop there, however—even against such odds, I have seen him send a gangster to the penitentiary—witnesses were intimidated and killed. Cases were appealed, the guilty released on bond and the case pigeonholed for years. His convictions were hard-won and seldom effective because the guilty was soon at liberty, regardless of the decision of 12 men tried and true, a judge's admonition and Larry's weeks' of effort.

Then came a case in which the police arrested two men while in the act of robbing a soft drink parlor. One of the thugs was killed in the battle which ensued, the other was caught a block away from the scene. A policeman positively identified the second crook. I turned the story in and it was played up under a streamer, or eight-column head. The following day the policeman, for some unknown reason, changed his mind. He wasn't quite certain that the gangster arrested was the one who had held up the store.

And the gangster, backed by a shyster lawyer, instituted a libel suit against the newspaper!

When notice of the suit was received by the paper I was called into the office, given the notice and told to settle the matter.

I found the thug in a saloon. Pressing the muzzle of a gun against his ribs, I told him that I was a member of an opposing gang (one still in existence), and that we wanted to see less of him about the city for some time to come. The suit was dropped because the complainant failed to appear. Six months later the man returned to the city. Two weeks after that he was killed in a hold-up.

The police are not to blame for this condition. Many gangsters, who have never been convicted, have long police records, stretching over as many as 50 arrests. The duty of the police department ends with apprehension of the guilty; if they are then released by the courts the police are not responsible. And that will account for much of the crime increase; the ability of the crooks to rob, murder or steal, then go into court and beat the case.

A few years ago it was possible for the police to send a criminal to the courts with the assurance that he would be punished. Today, the officer of the law has only a half-hearted interest in his work because he knows that his life-risking effort will probably be in vain. A few days after apprehending a notorious criminal, the policeman will again see the man in a hangout of thugs, preparing for another attempt at matching his wits against the law.

This is partly due to "reformers" who have seen to the abolition of the third degree. This

method generally consisted of giving the suspect a beating, followed by hours of questioning. No one, whom the police were not reasonably sure of being guilty, was subjected to this treatment.

The "third" brought many lawbreakers to justice, because their confessions were used as testimony in their prosecution. During the last few years this has become an illegal offense in most cities. A prisoner, claiming third degree treatment, can repudiate a confession and get away with it.

With these new and favorable conditions, is there cause to puzzle over the increase in crime? The thug has much more favorable conditions under which to work than many labor union members. His goal is high, returns are plentiful and punishment rarely suffered.

In most cities, the police are hampered by the courts, "reform" societies and professional bondsmen. Granting that the circuit attorney did all in his power to bring the guilty to justice, we will proceed to show how one man, in a middle-western city, has evaded the law for the past 10 years, even committing new crimes while charges of former acts await action of the courts.

This criminal we will call Black, because that is not his name. Our purpose in keeping his identity secret is evident; having never been convicted, even though guilty, Black could institute libel proceedings if his proper name were used.

Black first came to the attention of the police 10 years ago, when, as a youth, he was arrested and charged with stealing brass from a junkyard. The case was dismissed by a kind-hearted judge, who advised the boy's parents to see that the act was not repeated. From that time to a few months ago, Black had been arrested exactly 101 times, but he had never been convicted. For eight years he was consistently arrested each time a certain gang hangout was raided; but the court, for want of evidence, released him on each occasion. The police believed him to be implicated in a number of "jobs" but they could get no evidence against him, except his bad companions.

Then Black was caught "cold turkey," to indulge in police parlance, in a drug store robbery. He waived preliminary hearing, was bound over to the grand jury and released on a bond of \$5000. Three weeks later, he was arrested as a suspect in a bank robbery. This time his bond was fixed at \$10,000. He was tried for robbing the drug store, found guilty and sentenced to five years in the penitentiary. The case was appealed, new bond furnished, and Black is today a free man. The second charge, for some reason, was nolle prossed.

Black's case is only one of hundreds which are coming into prominence daily. A citizen is held up and robbed. Perhaps he can identify his assailant. The police, upon being furnished a description, start in search of the criminal whom the description fits. He is arrested and the victim is notified. In the meantime, some of the

gangster's associates call upon the victim and threaten to kill him if he identifies their companion. *What can the law-abiding citizen do?* If he identifies his assailant, he is likely to be murdered before the trial; he has no means of protecting himself; and, on the other hand, the criminal will probably go free even though identified. The result is that the victim fails to identify the gangster who robbed him.

Then, there are other cases in which the criminal is caught "with the goods." The prosecutor announces that he has every reason to believe that he will be favored with a conviction. The witnesses are called in and examined. Time passes, and the case is nolle prossed.

Sometimes the witnesses disappear. Where do they go? It is commonly believed in police circles that the unidentified bodies taken from rivers, vacant lots and ash pits account for some of them.

In another large city, about four years ago, a policeman was tried for murdering a gangster. Testimony at the trial tended to show that the gangster had boasted that he could "bump off" a cop, go "upstairs," as the circuit attorney's office was known, and beat the case. He tried it, but the "cop" beat him to the draw. And a former assistant of the circuit attorney acted as counsel for the prosecution, which was elaborately conducted. Had the court room been locked while the trial was in progress, two-thirds of the lawless element of that city would have been confined. The case was backed by the entire underworld. But the policeman won.

Had the policeman been an unarmed citizen, the thug would have killed him.

A short time later, in the same city, a negro, while robbing a pedestrian, became nervous and killed his victim. The murder occurred on a viaduct. Nearby was a policeman, but a heavy fog obstructed his view. The policeman ran across the viaduct, found the negro bending over his victim, revolver in hand, and arrested him. One cartridge had been fired from the gun which was taken from negro. The caliber was the same as the bullet found in the dead man's body, but the negro maintained that he had been walking over the viaduct, heard the shot nearby, found the man dying and picked up the gun.

The gun was traced to a pawn shop, where the proprietor admitted having sold it to the negro, even identifying him. Still the thug would not confess. Then the police resorted to third degree methods.

The criminal was hardened. Questioning failed to shake him. A tourniquet, constructed of a rope and a policeman's billy, was placed around the slayer's head. A twist was taken with the billy, and the negro then asked why he had murdered the man. At about the fifth twist the negro confessed.

At the trial he repudiated his confession, claiming that he had been subjected to the third degree. The police admitted that this was true, and the negro went free. Two weeks later he

killed another negro in cold blood, was captured by an eye-witness and is now doing a life sentence in confinement.

When the news of the negro's being subjected to the third degree reached the ears of the reformers, a great howl went up. An innocent man had been cruelly persecuted by the police! This must be stopped. And the local crime market went on a bearish rampage.

The increase in crime, as I have previously stated, is not due to our police departments. *It is the natural result of laws prohibiting the carrying of firearms.* There is but one sane solution of the crime question; that is the repeal of these laws.

While editor of an Illinois newspaper, I was made a special officer by the local police chief. The city was a haven for notorious crooks who went there to plan their activities and divide the spoils. One evening I was called to headquarters to join in a raid on a hotel at which a gang was reported to be preparing a robbery. Members of the police force surrounded the hotel, while the chief and I advanced upon the room in which the men had congregated.

The chief rapped on the door and demanded admittance. The answer was for us to "get out or get our d— heads blown off." We broke the door and found the men, five of them, with five large revolvers arranged in a row upon the bed. There was nothing to arrest them on except suspicion. They had no concealed weapons, and there was no definite charge against them. A short time after that, the treasurer of the paper of which I was editor, who was also a special officer, was killed, and two policemen were critically wounded, in another raid upon the same gang.

Being short of funds with which to increase the police force, the chief was at a loss to cope with the situation, until he decided to enroll 500 special officers from the ranks of the business men of the town. This was an unexpected move, and, after six thugs were killed while attempting to rob apparently unarmed citizens, the rest of the gang moved to another city.

Even in that community the shyster was prominent. The circuit attorney was confronted with the same problems that Larry McDaniel had to cope with. Cold-blooded murderers walked, free men, from courts of justice.

This condition is not confined to the cities in which I have lived. It is general throughout the country, with the exception, perhaps, of California, where a new law has been passed to allow citizens to exercise their Constitutional Right in aiding the police and the courts.

Lawrence McDaniel, whose previous experience in dealing with thugs has given him deep insight into prevailing conditions, suggests an even more feasible plan than that of the California legislators. Larry has the dope.

"Regardless of my personal opinion as to whether the interpretation of the Supreme Court

in regards to Article II, Amendments to the Constitution, this ruling is final in so far as the office of the circuit attorney is concerned," Mr. McDaniel said. "The situation, therefore, can be remedied only within the various states, unless action is taken by Congress. I would have the authority to issue permits to carry concealed weapons vested with the Circuit Attorney's office, or with some responsible state official. These permits would be given only to persons who could show good reason for desiring this privilege, but they would not be restricted to a select few.

"Any man who believes himself in danger should, in my opinion, be allowed the right to protect himself. This, of course, applies to law-abiding citizens only. And any man who can produce credentials to establish the fact that he is a reputable citizen, should be allowed this privilege.

"I believe that such a law as that recently enacted in California will work out to the good of the public, and I am sure that had such a law been in effect during my time in office my work would have been greatly simplified.

"Criminals and crime are increasing. This is due to progress and the inability of the private citizen to protect himself or his property. The courts and the police can assist him only to a limited extent. Our forefathers provided for our protection, but this provision has been so altered as to be ineffective. Our Constitutional Right provides for our personal protection; but who is going about with a gun swinging in full view of the crowd? As I have previously stated, regardless of our interpretation of the Constitution, the Supreme Court has seen fit to interpret it otherwise. We can only abide by that decision while endeavoring to enact new rulings or modify these decisions to conform with the present situation."

California has cleared up crime with the previously-mentioned law, which prohibits the possessing of firearms by persons who have been convicted of a criminal offense and also by unnaturalized foreigners, but allows the citizen in good standing the privilege of purchasing and possessing a revolver or pistol. Senator Capper, of Kansas, has prepared a bill, which he will introduce in Congress, much along the same lines. This bill should be given the support of every law-abiding citizen because it will, if passed, become a national law, while such measures as that taken by California will, if left to individual states, never become general, because the crooks' control is too great in many of our cities.

With the support which it merits, this bill should be passed by a unanimous vote. This support can be secured only through concerted action. Sporting goods dealers—for that matter every one interested in law enforcement—should spare no effort to impress upon the voting public the importance of this bill. "If you would have a good servant," said Franklin, "serve yourself." Let's get behind this bill!—Reprinted by courtesy of *The Sporting Goods Dealer*.



## Stocking of Match Rifles

(Concluded from page 4)

To ensure that the contacts at F and H are firm, other points must be looked to. The collar C must be filed to such a length as will make it shorter than the hole in which it fits. If this collar is too long, the back action screw will tighten on to it and not on to the wood, and the body and trigger guard will then be free to move, relatively to the stock, about the front action screw as a centre. It is also advisable to make sure that both action screws are threaded a sufficient length to make a tight fit on the wood between the body and the trigger guard. The front action screw must not be so long as to make contact with the bottom of the hole in A without binding the stock. The magazine projection B, also, is in many instances so long that it binds on the trigger guard extension and prevents a proper grip of the wood being obtained. The end of this projection should be filed so that it cannot make contact with the metal.

The recoil plate E is a most important part of the stock. It consists of a piece of steel let into the wood so that the recoil abutment A bears on it. It thus transmits to the stock the recoil movement of the barrel and body. It has been found that in a number of faulty rifles this recoil plate had been removed. In others, considerable play was found to exist between the recoil plate and the recoil abutment. The zero of a rifle must shift when either of these faults is present, because the recoil is taken by the action screws and the thickened end of the tongue of the body where it comes in contact with the stock. Consequently, on firing, the body and barrel move backwards in relation to the stock, and afterwards the movement may take a forward direction on the recovery of the action screws put under strain. To prevent any play between the recoil plate and the recoil abutment, the former may be packed at its rear surface with sheet tin cut to the shape of the plate. When the adjustment has been properly made and the body is placed in the stock without screwing up, its movement backwards is felt to be prevented by the recoil plate, and there is clear evidence that the rear surface of the tongue of the body is not in close contact with the wood.

### MAUSER ACTION

Figs. III and IV are photos showing the same points as have been referred to under the Mannlicher. The essentials as regards stocking are the same, and many of the points already dealt with obviously apply to the Mauser. There are several varieties of the Mauser action in use at Bisley and they differ rather widely.

There are two surfaces that should take the grip of the body and stock, viz., a flat surface, marked F in Fig. IV, and either the surface just in front of the thickened part of the tongue of the body or the front part of the stock where the tongue comes, which is marked H. Which of these two surfaces is utilized for the second contact depends on the rifle, because in some the wood in front of H is cut away so much that

the surface H must be used. If possible, it is best to make use of the surface in front of H, as in the Mannlicher.

To make a good stocking, attention must be given to the length of the collar D (Fig. III) for the reasons mentioned for the Mannlicher. There is a collar fixed to the trigger guard for the front action screw at B. This collar has on its surface a recess to receive a projection at A. Frequently this projection is burred up so that it will not readily enter the recess. When this is the case, the burr must be removed, so that there is no danger of the projection riding on the top of B and not entering; if this occurs, it will not be possible to make a tight grip at F.

As with the Mannlicher, the projection A forms the recoil abutment, and the recoil is taken at E (Fig. IV). Very few Mausers have a metal recoil plate, the recoil being usually taken directly by the wood. The recoil abutment is large in area, and consequently the wood alone is sufficient if the fitting has been nicely adjusted; usually, however, the adjustment is bad. It is wise to examine this fitting, and if it is not clear that the contact is close, to place a piece of sheet tin of suitable thickness on the wooden recoil shoulder. This is not always easy, because the part marked B is in the way. But it is necessary that the surfaces should be in close contact for the same reasons as with the Mannlicher.

Most of the faults of stocking with the Mauser lie with the magazine box C. This is generally too deep, and there is contact between the edges marked with an arrow in Fig. III and the lower part of the body, thus making a tight grip of the stock impossible. The top of the magazine box should be filed down so that it cannot touch the body of the action. This also applies to the raised piece at the rear of the magazine box which enters into the body.

Generally, it may be said, that the Mauser presents more stocking difficulties than the Mannlicher, but that these can be overcome by attention to the points that are obvious when once the essentials of stocking are understood.

All precautions to obtain good stocking will be useless if the action screws are allowed to become loose, as constantly tends to happen, from the jars of firing. With some actions set screws have been fitted to the action screws to prevent them from turning. As a rule these set screws operate only for one particular position of the action screws, which it is therefore almost impossible to leave tightly turned home. Further, when set screws are fitted, the action screws are seldom tested, and the give of the stock is not detected. The best plan is to make a practise of testing the action screws after every shoot; if they become abnormally loose, this is an indication that something is wrong, and it may be desirable to have them replaced. They should be turned home with a reasonably large screwdriver, but not so forcibly as to risk straining them.

The position of the barrel in the body of the action should be periodically examined. It may happen that the barrel will become slightly unscrewed, which naturally displaces the wind zero. There is a mark on the body which should be coincident with one on the barrel.

A loose fitting of the body of the action and the stock may possibly affect the shooting other-

wise than by disturbing the relative position of the two sights. Many rifles have a negative jump of as much as 12 minutes of angle. Normally this jump depends largely on the velocity of recoil when the rifle moves backwards together. It is conceivable that the jump may become abnormal when the action and barrel move backwards some small fraction of an inch and acquire some recoil velocity before the stock takes part in the backward movement.

COTTESLOE,

Chairman, Match Rifle Experimental Committee.

## Walter's Uncle Jim

(Continued from page 11)

just as easy have happened to me or my wife if we had let that girl keep it in our house."

"Ye-ah," drawled Lon. "If you don't savvy any more about pistols than Johnnie, you might have shot yourself in the eye or somethin'. I don't reckon Johnnie ever handled a pistol before in his life, or he'd be known enough to leave the hammer on a dead shell."

Just then the doctor came in. "How's Johnnie making it?" asked Walter.

"Nicely," said the doctor. "The hip wound is healing, but I am afraid his wrist will always be stiff."

"Ought to have a law agin' crankin' a flivver," grinned Lon.

"That's the way with you," growled Walter. "You always bring up something irrelevant. A car is a necessity—look at the pleasure we get out of them!"

"Ye-ah, look! An' keep lookin' out! Just when you think you've got it gentled, it up an' kicks your teeth out, breaks your 'wrist, or you run over some innocent child an' break its back an' send it through life a cripple! . . . They ought to pass a law agin' 'em. Just let officers and such have 'em. Then the robbers an' bad boys couldn't use 'em in holdups an' to smuggle booze in, an' to peddle. Ye-ah, I'm in favor of prohibitin' flivvers."

"Ah, you talk like a fish. There's no comparison between cars and guns."

"Not a bit. The Constitution particularly specifies that folks may bear arms, an' it don't say anything about 'em bearin' flivvers. You see, the writers of that beautiful little prose poem had seen the bad effects of disarmin' the people. An' they knew it wouldn't cut much ice if they was to bar the flivver from general circulation!"

"Well, I'm going to buy a car; and I won't give you a ride. . . . Did you see that big boat the prohibition officers seized and are going to auction off this afternoon?"

"No, I'm sorry to say I didn't see it—first."

"It's a big twelve-cylinder touring car, cost new around \$4000.00 if a cent. I'm going to buy it in. It will sell at five o'clock. My wife has gone home on a visit and I want to surprise her with it when she gets back."

"It's four-thirty now," said Lon. "Let's go on up there."

"Wait till I get my money. You know you can't do business with Uncle Sam without cash on the nail." Walter stepped in his real estate office and took a roll of bills from his desk.



"Whew!" breathed Lon, seeing the roll. "You real estate guys sure gather the dough!"

"There's eleven hundred dollars in that roll. Been saving it for three years to buy a car with. We wanted a medium priced car, around fifteen hundred, but if I can get this battleship for eleven hundred I'm going to buy her."

The sale did not start till almost six o'clock, as the official came in on number four and it was late. Walter stood with his roll of bills in his hand as a bluff. He wanted the other bidders to think he was lousy with cash. The bidding started at five hundred, then ran along in jumps of ten to twenty dollars until it reached a thousand. The crowd was entertained by the looks Walter received from a group of four strangers that were evidently acquainted with the car, if they were not friends of the bootlegger, there to bid it in.

At Walter's bid of ten-fifty one of the strangers snarled, "Eleven Hundred!" and Walter wiped his brow.

"Here's a hundred," said Lon, "go on with your rat-killin'."

"Eleven-fifty!" sang out Walter with renewed vigor.

"Twelve hundred!" snarled the stranger, glowering at Walter. And there the car sold.

The crowd quickly dispersed. Walter hung around a few minutes looking over the prize he had lost. Then he and Lon walked down the street together. It was cloudy and quite dark as the street lights had not been turned on yet. Just as they came to an alley, a man suddenly stepped out.

"Stick 'em up!" he commanded, holding an automatic on them.

Lon's hands were probably the first to go up, as Walter did not recognize the situation at once.

"Come on, you little squirt, put 'em up 'fore I plug yuh!" snarled the man with the gun. Another man came up behind them.

Walter put his hands up and tried to swallow his heart. The man behind stuck his hand in Walter's right pants pocket and took the money. "Too bad you don't believe in guns for common people," drawled Lon.

"Shut up!" snapped the robber. Then, to his partner behind, "see what he's got."

A hand slipped into Lon's pants pocket and came out. "Sixty cents!" said the voice behind. "Cheap bluffer—ought to kick a lung outta him!" and he gave Lon a shove. Lon staggered forward, jerked down his arms as though to catch himself, and there was a stab of flame from his stumbling form, then another. The man with the gun fired once into the ground, as he slumped forward, then rolled over and fired again.

Lon had rolled off the curbing and shot at the running man behind. Walter jumped behind a telephone pole and saw the running man stumble, gain his equilibrium and disappear around the corner. The other holdup lay breathing with a bubbling sound like he was blowing through a straw into a glass of lemonade. Lon got to his feet, kicked the automatic out of reach of the fallen man, punched the empty shells out of his triggerless sixshooter and began to slip in live shells.

"Better pick up your roll, Walter," indicating a dark object on the sidewalk. Walter picked up

his money and ruffled bills. "Is it all there?" Lon asked.

"Looks like it—too dark to count. . . . If it hadn't been for you they'd have gotten ail my savings—and the hundred I borrowed from you." "Oughta buy a gun," advised Lon.

\* \* \*

**W**HEN the excitement was over and they had been dismissed by the sheriff with orders to stick around for the coroner's inquest the next day, Walter asked Lon to walk home with him. At the gate he said:

"I didn't tell you all about Uncle Jim. He surprised a burglar in his house one night and the burglar killed him with a piece of lead pipe. . . . I believe I'll buy me a—what kind of a gun is yours?"

### Estimate Made of Big Game Animals on National Forests

**N**EARLY 441,000 head of deer make their home on the national forests, according to a rough estimate of big game animals recently completed by forestry officials of the United States Department of Agriculture. The largest herds of deer are found on the national forests in California, which shelter approximately 185,000 head.

Oregon is next to California, with a total of 57,000, its largest herd being on the Santiam National Forest. Montana ranks third, with a total of 41,000 head, the largest single herd of which grazes on the Jefferson National Forest. Idaho is fourth, with a total of nearly 39,000.

Sixth on the list is Arizona with about 34,000 head of deer, 20,000 of which graze on the Kaibab National Forest alone. This forest contains the Grand Canyon National Game Preserve, where hunting is not allowed. The herd on the Kaibab Forest has often been erroneously described as the "largest herd of deer in the world." As a matter of fact the Kaibab herd is greatly exceeded by the herds on the Trinity and California National Forests in California.

The number of elk grazing on the national forests is placed at 40,500, according to the big game estimate. The Teton National Forest in Wyoming, bordering the Yellowstone National Park on the south, contains a larger number of elk than any other national forest, although several other, notably the Olympic Forest in Washington, have herds ranging from 3,000 to 7,000 head.

On all national forests hunting is allowed in the open season except on areas established as Federal or State game refuges.

During the last three years the winter losses of elk in the national forests surrounding the Yellowstone Park have been negligible. The increase in the herds has been high, and two or three years more of mild winters and good summers may bring another danger point with a die-off in a hard winter such as was experienced in 1919-20.

Forest Service officials point out that a permanent increase in the elk of the Northwest, especially around the Yellowstone, is largely a matter of available winter range, which is extremely limited, the greater portion of the old winter

ranges having been taken up by settlers for homesteads.

The recent big game census also shows increases during the past few years in several plants of elk made on various national forests. The plant made about ten years ago on the Sitgreaves Forest in Arizona, consisting of about 65 head, now numbers over 350 head, and it is possible that the State Game Warden may permit hunting of elk in the near future in order to check too rapid growth.

The antelope, or pronghorn, are still in a very unsatisfactory situation, forestry officials say. The census shows a few antelope in many national forests, but nowhere are they increasing. In northwestern Nevada and southeastern Oregon there is a large antelope herd, estimated at from 1,500 to 3,000 head, grazing on public lands outside of forest areas. An effort is now being made to secure the creation of a game refuge which will cover the habitat of this herd so that it may be protected from extermination.

The number of moose on the national forests has been increasing in recent years. The largest number is found on the Teton National Forest in northern Wyoming where moose are now becoming rather plentiful.

In addition to deer, elk, and antelope, the estimate lists 149 buffaloes on National forests, 67 caribou, 10,500 mountain goats, and 12,300 mountain sheep.

The buffaloes are mainly on the Wichita National Forest and Game Preserve in Oklahoma. Forty buffaloes, representing the increase of this herd beyond the carrying capacity of its range, have been given to city parks and zoological gardens during the last four years. One buffalo was presented to the Republic of Mexico and one to Montevideo, Capital of Uruguay.

The estimate as a whole indicates that except for the antelope there has been a slight increase in the number of most big game animals on the national forests. The census was conservative, and an underestimate is regarded as more likely than an overestimate.

The Department of Agriculture calls attention to the fact that wherever it has been necessary to protect big game animals, especially deer and elk, from competition with cattle and sheep for forage, the Forest Service has curtailed grazing permits for domestic livestock. Heavy reductions have been made on the Kaibab National Forest in Arizona in order to make more forage available for the rapidly-increasing deer herd. About 90 per cent of the cattle and all sheep have been withdrawn from certain areas in the National Forests in the Yellowstone region in favor of the elk grazing in and near the Yellowstone Park. The areas thus closed to grazing in that region amount to over 1,500,000 acres of excellent range.

As a rule, except on the Kaibab National Forest in Arizona, the big game animals have at this time a sufficient amount of summer forage for their needs, but there is a general shortage of winter range. On the Kaibab even the summer range is already overstocked with deer and the inevitable further increases in this deer herd makes losses almost certain should a combination of a dry summer and a severe winter occur—not unusual in northern Arizona.

# THE NRA NEWS

Conducted by C. B. Lister

## MORE CLUBS USING LOCAL PAPERS

THE following paragraph from a letter from Mr. M. C. Goodspeed, Secretary of a rifle club in Erie, Pennsylvania, is typical of numerous requests that are coming in as the gallery season gets into full swing:

"Will you please advise as to whether or not references or quotations may be made from THE AMERICAN RIFLEMAN provided credit is given for these references? Our reason for asking this is that we are trying to arrange with the local newspapers to publish certain data in connection with our local club and we feel that there are certain points well brought out in THE AMERICAN RIFLEMAN which we would like to incorporate in the local news."

We are glad to tell you that anything that is used in THE AMERICAN RIFLEMAN, formerly *Arms and the Man*, may be reprinted in your local newspaper. The magazine is published as the official organ of the N. R. A., and its particular business in life is to spread the gospel of straight shooting. This blanket permission to reprint naturally does not apply to articles which are personally copyrighted by the authors. Such articles always carry a copyright notice.

The plea of rifle clubs has long been that they were unable to get items printed in their local papers concerning the club's activities. The plan which seems to have been adopted with a great deal of success by a number of clubs to date this year has been to take a portion of the load off the shoulders of the sporting editor or the city editor by arranging to maintain a rifle shooting column in the paper. Particularly during the winter months, sporting editors are sometimes pressed for material to fill their page, and the promise of a definite number of inches of space for a certain day each week is accordingly gladly accepted. Clubs which have found it hard to get the co-operation of their newspapers in editing copy covering local shoots may find that by co-operating with the newspapers and offering to help them fill space, the desired end may be obtained.

## AMERICAN FREE RIFLE TEAM AWARDED ALL WORLD'S RECORDS

A bulletin has just been received from the International Shooting Union containing information that the results of the International Free Rifle Matches at Bayonne-Biarritz in 1912 have been thrown out of the official record because the range was not correct, and establishing the present world's records for teams as follows:

Team Championship, America, 5301 x 6000  
Team Standing, America, 1672 x 2000  
Team Kneeling, America, 1745 x 2000  
Team Prone, America, 1884 x 2000

The new ruling leaves Sergeant Morris Fisher, of the Marines, with all the individual records with the exception of the standing record. Fisher's record over the entire course is 1090 x 1200, kneeling, 367 x 400, and prone, 385 x 400. Renee George, of France, holds the standing record established at Viborg in 1914 at 348 x 400. All the present world's records held by the Americans were made at Camp Perry this year.

## REAFFILIATION AND ANTI-GUN LEGISLATION

Reaffiliations for 1924 are being received at a rate that indicates still another biggest year for the Association. The request that present members each secure one additional member for the Association has received a favorable response, and if complied with by every man who affiliated in 1923, will give the N. A. R. a membership list which will mean something when the Association finds it necessary to step into the breach against the anti-firearms statutes which will make their annual appearance with renewed vigor in the coming legislative session. Rifle club secretaries who impress on the members of their clubs the fact that this work of the Association vitally affects every shooter as an individual, and that only the actual number of individual members definitely affiliated with the Association is considered by legislative committees when they are approached with the proposition that there are thousands of Americans who like to shoot and who are a protection to their community, rather than a menace.

## COMBINE INDIVIDUAL MATCHES WITH CLUB TROPHIES

A plan for awarding a trophy to a club on the basis of the performance of its members in an individual match is outlined in the following bulletin from the California Rifle and Pistol Association:

"The Union Oil Company Qualification Trophy will be awarded to the Civilian Club scoring the most points under the following schedule:

For a score of 330 or better	10 points
" " " " 320 to 329	8 "
" " " " 310 to 319	7 "
" " " " 300 to 309	6 "
" " " " 293 to 299	5 "
" " " " 275 to 292	4 "
" " " " 240 to 274	3 "
" " " " 230 to 239	2 "
For all completed scores of less than 230	1 "

Incidentally, the fact that the California Association is able to award the Union Oil Company Qualification Trophy is an example of the interest

that the commercial companies of the West Coast are taking in rifle shooting as a result of the activities of the California Association. State Associations can do a great deal to put the game on the map in this country, and there should be more of them of the aggressive type such as the California, Indiana and Illinois organizations.

## SOMETHING NEW UNDER THE SUN

It is a hackneyed phrase "there is nothing new under the sun," and if the performance of the New Jersey State Police does not represent something new under the sun, we give up the search. The State Police in New Jersey are one of the discouragingly few organized police forces engaging in consistent rifle and revolver practice. The force at the present time numbers 121 men, firing the regular army pistol qualification course. Forty-three of these men qualified as expert, thirty-three as sharpshooters, twenty-seven as marksmen, and only eighteen were unqualified. Even the lowest average for the men who unqualified was close to fifty per cent over the Army course, which includes as you probably know, rapid fire, timed fire, and bobbing targets, but the premise on which we base the argument that here is something new under the sun is the fact that every officer of the force averaged eighty per cent or higher. Major Mark O. Kimberling, Deputy Superintendent, averaging 94.99 per cent and Colonel H. Norman Schwarzsoff, Superintendent of Police, 92.61 per cent. If the State and Metropolitan Police in every municipality could handle their guns in this manner, the insurance companies would make a lot of money out of the premiums that the banks pay them to cover robberies. Incidentally, it is of record that a New Jersey State trooper never draws his gun until he has to use it, and in the few instances in which such occasions have arisen since the organization of the force a year ago, the trooper has not in one single case failed to get his man.

## NEW DATES FOR COMPANY MATCH

It has been decided to extend the time limit of Match No. 27, (Company Team Match) 1923-24 Gallery Program, from January 5 to February 9. The teams which have already entered and have received their targets will fire the match in accordance with the time laid down in the program. Entries will be received up until and including December 31. Targets to be in Washington by February 16.

## SPOTTING SCOPES

The Association has available for sale a limited number of spotting scopes of the four-draw type having two eye-pieces, one thirty-five power, and the other twenty-five power. These scopes have sole leather covers and caps to protect the ends with a generous length carrying strap. Except for the limited output of our American scope maker, Fecker, these are undoubtedly the best spotting scopes available at the present time. Under favorable conditions, they will spot bullet holes at 600 yards, and will pick up .22 calibre holes in the target under almost any condition at 200 yards. The price of the scopes to rifle clubs or individual members is fifty dollars.

## MORE ABOUT TURKEY SHOTS

In the last issue we mentioned something about turkey shoots and suggested Mr. C. C. Finn as one who might offer some suggestions. The handbill reproduced below indicates the kind of turkey shoots that Mr. Finn thinks it is safe from the financial standpoint of the club to stage. Incidentally, the fact that this is a handbill of the sort that is distributed from door to door and displayed in stores all over town, indicates that the right way to hold a successful turkey shoot is to advertise it in advance not only to club members, but to everybody.

## RANGE TELEPHONES

When the annual discussion relative to what ails the range and how it can be improved comes up at the annual meeting, raise the question of a good phone line from firing point to butts. There are about ninety sets of field telephones complete, except for the small batteries which are required, available for sale to affiliated clubs at a price of fifteen dollars per set. No purchase could be made from club funds which would lend more to the efficient operation of the club range than a pair of these phones.

## 121ST ENGINEERS CHAMPIONSHIP MATCHES

The D. C. National Guard Championship Individual, Battalion and Company team Rifle Matches were held on the Camp Simms Range on November 3. The D. C. Guard follows a plan in its matches well worth the attention of civilian and service rifle organizations everywhere. In every match, first, second, and third place prizes are given, one to the man who has fired in the matches before, and another to the recruit ranking first, second, or third. In other words, there are six prizes in each match. To often, new men do not take the interest in their organization matches that they should because of their feeling that they cannot beat the old shots. The D. C. National Guard has consistently been a contender for honors in the National Matches, and this system of encouraging recruits must be considered as of no small value in developing high grade National Match teams.

## CLUB PICTURES

A preliminary booklet for the use of citizens desiring to organize rifle clubs has been prepared, and a hand-book for club secretaries is in course of preparation, for which photographs are urgently needed. Pictures are particularly desired showing how apparently unfavorable terrain has been used for laying out rifle ranges, the construction of inexpensive target pits, club houses, running deer, rising bear, and similar targets, the kind of a crowd that may be expected at a successful club shoot, etc.

## NEW TROPHY OFFERED

EVIDENCE of the interest with which the Regular Army has adopted the .22 Springfield and the Gallery Rifle Shooting Game is given in a communication from First Sergeant P. F. Mollerstrom, who captained the Gallery Team of Company "B," Seventeenth Infantry, which last year won the Military Company Championship of the Army in the Gallery. The men of "B" Company are so enthusiastic over their win that they have requested permission to donate a trophy or cup for perpetual competition in this match.

The following letter has been sent to Sergeant Mollerstrom in appreciation of his offer:

November 20, 1923.  
Sergeant P. F. Mollerstrom,  
Company "B," Seventeenth Inf.,  
Fort Crook, Nebraska.  
Dear Sir:

The splendid support of Company "B" of the Seventeenth in offering to subscribe a trophy for the Military Company Team Match is sincerely appreciated by the N. R. A. We feel, however, that a trophy for a match of this kind which is really the company gallery championship of the entire armed forces of the nation, should be donated by the N. R. A., and steps have been taken to obtain such a trophy. Your splendid offer will make us doubly glad to see that Company "B" occupies the place of honor as the first winner of this trophy.

Might it not be a good idea to present your trophy to the Regiment for award to the highest company in the Seventeenth in the N. R. A. Military Company Team Match, or to the high individual from the Regiment in the Individual Military Championship? If this plan meets with your approval, we will be glad indeed to receive a picture of the trophy after it has been purchased, in order that we may give Company "B" due credit and publicity through the columns of The American Rifleman. We will see that the next issue of the magazine carries an announcement making public your generous offer of a trophy for this match.

Very truly yours,  
F. H. Phillips, Jr.,  
Executive Officer.

## TURKEY SHOOT

WHEN—November 25, 1923 (the Sunday before Thanksgiving).

WHERE—Fort Lawton Range. Take Fort Lawton car to the end of line. Ask where the Range is and then follow the noise. Range is on the North Side of the Fort.

TIME—Beginning at 9:00 A. M. No tickets sold after 3:30 P. M. Shooting stops sharp at 4:00 P. M.

## RAIN OR SHINE

## STANDARD SHOOT CONDITIONS

RIFLE—Any old rifle.

SIGHTS—Any old sight.

AMMUNITION—Any old ammunition.

RESTS—No artificial rests of any kind. Gun sling is not considered a rest and is permitted.

POSITION—Off-hand.

DISTANCE—200 yards.

TARGETS—3½ inches white square, to be shot at off-hand; black background.

SPOTTING SCOPE—None.

How do you get a turkey?

Bust a plate or knock it down.

How much to take a hand?

Sighting shots, five (5c) cents per each.

Turkey shots, twentyfive (25c) cents per each.

## BRING YOUR LUNCH

## FIFTY TURKEY POOLS

TEN Persons to a Pool

50c—A SHOT—50c

POSITION PRONE—NO TELESCOPES

TARGET WESTERN A, 20" BULL

NEAREST SHOT TO CENTER GETS THE TURKEY

NEW TARGET FOR EACH POOL

TARGETS will not be returned to the firing line, but the winner will be announced by phone. A capable man will be in charge of the pit.

POOLS will be arranged for SCOPES, SPORTING RIFLE, POSITIONS OTHER THAN PRONE, 22 RIFLE, KIDS, LADIES, or any other arrangement wanted. When any pool is filled it will be shot. Contestants may purchase more than one shot in a pool or the whole pool; just so we get \$5.00 for each pool.

EACH SHOT on the target will be numbered by the pit man and he will announce which number is nearest the center. Pool card and shooter's card will show who fired the winning shot. Person shooting out of turn forfeits prize, should his shot win. Target will be spotted for each shot.

FIFTY OF THESE POOLS

have been arranged for

LIMIT ON TURKEYS? Bet you your life. Pos-it-ively only three to a customer.

HOW MUCH TURKEY? Nine pounds.

HOW LONG IS THE ORDER GOOD FOR?

This year we will have to require you to present the order by December 1, 1923. If presented after that date your order will be worth \$4.00 in trade. Order worth \$4.00 in cash at the Club office or on the Range.

WILL RIFLES AND AMMUNITION BE FURNISHED?

Not at all. Bring your own; don't even depend on being able to borrow any at the Range.

WHERE DO YOU GET THE TURKEYS?

Pacific Meat Co., Colman Bldg., 803 1st Ave.

**No Competitor Allowed to Shoot for Any Other Person Than Himself**

PLEASE NOTE. No autos permitted on the range except where the road crosses at the 600-yard mark. The one machine at the firing point is the Club office and is there by special permission.

NO GUNS PERMITTED TO BE  
LOADED, AIMED OR SNAPPED  
BEHIND THE FIRING LINE.

CHAS. C. FINN

Secretary Seattle Rifle and Revolver Club  
470 COLMAN BUILDING

**EVERYBODY WELCOME**





Conducted by Col. C. E. Stodler

## Shooting for Qualification

THE rifles used by civilian rifle clubs in firing for qualification may be any one of the rifles that has been issued to the Army for use. This includes the U. S. rifle, cal. 30, model 1903 (Springfield) the Model 1917, (Enfield) or the Model 1895, '96, '98, or '99 (Krag). The rifle must be used "as issued." Special sights, pistol grip stocks, palm rests or special butt plates are not permitted.

Rifle clubs should endeavor to have their members fire as much of the instruction practice as time and ammunition will permit. This can be done at the regular weekly shoots and need not follow the exact order prescribed in the tables. It is desirable, however, that this order be followed if practicable.

The firing with sand bag rest prescribed in Table I is for the purpose of giving additional practice in the correct method of pressing the trigger. The steady hold assured by the sand bag rest removes the tendency of the beginner to jerk the trigger as the sights drift past the bullseye.

By holding weekly matches at one or two distances and one or more positions a large part of the instruction practice can be covered in a season. After a suitable amount of instruction practice, one or more days should be designated for record practice for the purpose of qualification. Record and instruction practice should not be fired on

the same day unless the time is so limited as not to permit of firing the record practice on another day.

Record practice must be fired strictly according to the regulations prescribed in "Rifle Marksmanship." When once begun no sighting shots or practice shots are permitted except the two sighting shots prescribed in course A, Table V at 600 yards. It is not necessary that the record practice shall be completed in one day but it may be held on two or more days provided no practice firing of any kind is done from the time record firing is started until it is completed.

The men in the pit are not permitted to know who is firing on any particular target. A record of all shots fired should be kept for each target by the pit detail and this record should be compared with the record kept at the firing point after the firing has been completed.

No coaching of any kind is permitted while a score is being fired. After the firer has taken his place at the firing point no one will give him any assistance of any kind. He must do his own spotting and make his own observations and corrections and is allowed to use field glasses, telescopes and sight setting instruments. Instruments for determining the direction and force of the wind may be used during instruction practice, but are not permitted during record practice.

After the record practice has been completed the scores should be properly entered on O. D. C. M. Form 2 and forwarded to the Director of

Civilian Marksmanship, 1115 Woodward Building, Washington, D. C., who will issue the appropriate badges to those who have qualified. Only one qualification will be credited to any individual and only one badge issued in one calendar year. Badges are not issued for lower qualifications than that previously made.

The War Department has adopted new marksmanship badges consisting of a basic badge for each of the grades of marksman, sharpshooter and expert. A bar showing the course fired is attached to the badge. The issue of bars for each three years of qualification is not authorized by the new regulations, but this office will endeavor to issue bars to all who have earned them up to December 31, 1923.

The supply of 1922 National Match ammunition cal. 30, Model 1906 has been exhausted. No National Match ammunition of any kind is available for sale at the present time.

Arrangements are being made for the manufacture of a supply of 1924 National Match ammunition for sale to members of the N. R. A., but it will not be available for several months.

## The Army Qualification Course

THE revised edition of Rifle Marksmanship which has been published as "Training Regulations No. 150-5, Individual" and "Training Regulations No. 150-10 General" has made very little change in the methods of instruction but has changed Courses B, C, and D and changed the scores required for qualification in Course A.

Reserve Officers' Training Corps units, Citizens' Military Training Camps and Civilian Rifle Clubs may fire any one of the four courses. Civilian Rifle Clubs are not required to have an officer of the Army, the National Guard, or the Reserve Corps witness their firing for qualification but the club officers may now witness the firing and sign the certificate on the record sheet.

The complete courses including both instruction and record practice given below.

### Course A—Instruction Practice

TABLE I.—Slow fire.

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone with sandbag.
300	do.....	10	A	Do.
500	do.....	10	B	Do.
600	do.....	10	B	Do.

TABLE II.—Slow fire—To be fired twice.

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone without sandbag.
300	do.....	10	A	Do.
500	do.....	10	B	Do.
600	do.....	10	B	Prone with sandbag.

<sup>1</sup> Two sighting shots (2 a.s.) will be fired at 600 yards.

TABLE III.—Slow fire.

Range.	Time.	Shots.	Target.	Position.
300	No limit.....	10	A	Sitting.
300	do.....	10	A	Kneeling.
200	do.....	10	A	Standing.

TABLE IV.—Rapid fire.

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting or kneeling from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.
500	1 minute, 20 seconds.....	10	D	Prone.

b. Record practice.

TABLE V.—Slow fire.

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Standing.
300	do.....	10	A	5 sitting, 5 kneeling.
500	do.....	10	B	Prone.
600	do.....	10	B	Prone with sandbag.

<sup>1</sup> Two sighting shots (2 a.s.) will be fired at 600 yards.

TABLE VI.—Rapid fire.

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting or kneeling from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.
500	1 minute, 20 seconds.....	10	D	Prone.

**Course B.—a. Instruction practice.****TABLE I.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone with sandbag.
300	do.....	10	A	Do.
500	do.....	10	B	Do.

**TABLE II.—Slow fire—To be fired twice.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone without sandbag.
300	do.....	10	A	Do.
500	do.....	10	B	Do.

**TABLE III.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
300	No limit.....	10	A	Sitting.
300	do.....	10	A	Kneeling.
200	do.....	10	A	Standing.

**TABLE IV.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting or kneeling from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.

**Record practice.****TABLE V.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Standing.
300	do.....	10	A	5 sitting, 5 kneeling.
500	do.....	10	B	Prone.

**TABLE VI.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting or kneeling from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.

**Course C.—a. Instruction practice.****TABLE I.—Slow fire—To be fired twice.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone with sandbag.
300	do.....	10	A	Do.

**TABLE II.—Slow fire—To be fired twice.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone without sandbag.
300	do.....	10	A	Do.

**TABLE III.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
300	No limit.....	10	A	Sitting.
300	do.....	10	A	Kneeling.
200	do.....	10	A	Standing.

**TABLE IV.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting or kneeling from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.

**Record practice.****TABLE V.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Standing.
300	do.....	10	A	5 sitting, 5 kneeling.
300	do.....	10	A	Prone.

**TABLE VI.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Sitting from standing.
300	1 minute, 10 seconds.....	10	D	Prone from standing.

**Course D.—a. Instruction practice.****TABLE I.—Slow fire—To be fired three times before proceeding with Table II.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone with sandbag.
200	do.....	10	A	Prone.

**TABLE II.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Sitting.
200	do.....	10	A	Kneeling.
200	do.....	10	A	Standing.

**TABLE III.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Prone.
200	do.....	10	D	Sitting or kneeling.
200	do.....	10	D	

**b. Record practice.****TABLE IV.—Slow fire.**

Range.	Time.	Shots.	Target.	Position.
200	No limit.....	10	A	Prone.
200	do.....	10	A	5 sitting, 5 kneeling.
200	do.....	10	A	Standing.

**TABLE V.—Rapid fire.**

Range.	Time.	Shots.	Target.	Position.
200	1 minute.....	10	D	Prone from standing.
200	do.....	10	D	Kneeling or sitting from standing.

**Qualification.**—The minimum aggregate scores required for qualification in each course are as follows:

Course.	Expert rifleman.	Sharpshooter.	Marksmen.
A.....	300	285	250
B.....	222	211	190
C.....	224	213	192
D.....	230	219	196

# THE DOPE BAG



A FREE SERVICE TO TARGET, BIG GAME AND FIELD SHOTS  
ALL QUESTIONS BEING ANSWERED DIRECTLY BY MAIL

Rifles and Big Game Hunting: Major Townsend Whelen

Pistols and Revolvers: Major J. S. Hatcher

Shotgun and Field Shooting: Capt. Charles Askins

Every care is used in collecting data for questions submitted, but no responsibility is assumed for any accidents which may occur.

## A Hunting Scope and Mount

By Townsend Whelen

**A**N opinion on the Hensoldt 'Scope, fitted with Noske mounts, has been requested by a rifleman who plans to use this sight interchangeably on a .22 caliber and a .30 caliber Springfield.

The Hensoldt Dyalit 2% power telescope sight, is an excellent hunting glass. Certainly I do not know of any better. It has excellent optical qualities, a large bright field, the correct eye relief, and a very large exit pupil. It is attractive in appearance, light, and small. It has one feature, however, which can be improved. The reticule consists of a thick, sharp pointed vertical post in conjunction with a thinner horizontal wire. In practice one concentrates on the sharp point in aiming, but it seems to fade out after a second or two of aim, or else some other optical illusion occurs, and one fails to see it sharply, and as a consequence shifts his aim lower down on the verticle post, so that occasional high shots occur. Both Captain Brown of the Infantry and I have found this fault very pronounced, and our groups always vary in elevation. Happily the fault can be entirely remedied by replacing the reticule by a similar one having a flat, square topped verticle post. Mr. Noske is prepared to make this change in a very perfect manner.

Regarding the Noske mountings, decidedly the best one is that without elevation adjustment, but with the micrometer adjustment for windage. Elevation is obtained by means of the adjustable reticle of the telescope itself. I know of no better mounting than this for a hunting rifle. In fact, it is the only obtainable mounting for a hunting rifle that is at all satisfactory. It does not interfere with the use of the Lyman or other sights when the telescope has been removed. The telescope comes off the base and goes back into exact alignment every time.

My experience with the Hensoldt telescope and Noske mounting has been that the adjustments for elevation and windage of neither is absolutely positive. This needs considerable explanation. For example, if there are bases on both .30 and .22 caliber rifles, I think that when the glass is moved from one rifle to the other, even if there has been kept a previous firing memorandum of just how the elevation dial and windage dial should be set on the second rifle, it will be found that each time the rifle will have to be sighted in over again because the dials do not positively bring the telescope to exactly the same point each time. Thus one time a setting of the windage dial at 15 may be just right. The next time at 15 the rifle shoots a little to one side, and four or five sighting shots may show that this time the dial should be set at 13 or 17, and so on. This is due to the two set screws setting up against each other to clamp the movable base tightly. They do not always clamp exactly the same. But once they are clamped they are positive.

Describing this a little differently, I think it will be found that this telescope and mounting cannot be accurately and quickly set for elevation and windage with say the assurance that a Lyman No. 48 sight can. If you wish to change the elevation or windage you will probably find when you start to move the adjustments that it will take five or more shots to get the telescope

positively adjusted to the right on an average. You move the windage two minutes left. Now the rifle shoots 1½ inches to the left, you move it back a minute and it shoots an inch to the right. Then you move it just a little again and perhaps you get it right. Now it seems as though it will stay right there indefinitely if the adjustments are not touched.

For a hunting telescope nothing better is required. Once the scope is correctly set you can rely on its keeping in adjustment no matter how many times you take it on or off that rifle.

For a target telescope, where, in order to obtain the highest possible score, it is very desirable to be able to make minute changes in elevation every few shots, I do not believe that the Noske is quite a satisfactory mounting. Indeed I think it was never intended for such use.

This feature (I would hardly call it a fault) can be remedied with respect to the adjustable reticule in the telescope, only at very heavy expense. I doubt if it can be remedied at all as to the adjustable windage in the base, because it will always be necessary to clamp this up very tight, and every time it is clamped and unclamped there is a slight variation.

To sum up, the Hensoldt telescope and Noske mounting are the best yet seen for a big game hunting rifle. They present, indeed, the only satisfactory combination I have found, although there are probably other glasses as good for this purpose as the Hensoldt, but none better.

They are not satisfactory on a purely target rifle, due to lack of absolute positiveness in changing adjustment. For a target telescope, nothing has yet been found equal to the sliding type of mounting with micrometer adjustments such as the Winchester with Winchester No. 2 rear mounting, the Fecker with the Winchester No. 2 rear mounting, or the Belding and Mull telescopes with their mountings. A telescope that slides in its mountings is absolutely unsuitable on a big game hunting rifle, but not very objectionable on a small game hunting rifle. A .22 caliber rifle demands so frequent changes in elevation or windage, even when used only for hunting purposes, that I hardly think the Noske mount would be entirely satisfactory. If the .22 is to be used partly for target shooting and partly for hunting I would much prefer a Belding and Mull telescope on it. If it is to be used only for target shooting I would prefer a high power (8 to 10 power) Fecker telescope with Winchester mountings.

If the .30 caliber rifle is to be used only for target shooting, a Belding and Mull glass and mountings would in my opinion be the best, but if this .30 caliber is to be used for big game hunting then I feel that the only combination at all satisfactory will be the Hensoldt or other equal telescope with Noske mount, and that there is no present substitute for this combination that will give real satisfaction on a big game rifle.

To show my own faith in this, I am gradually having Hensoldt telescopes and Noske mountings placed on my favorite big game rifles, but I have not considered placing them on other rifles. When I can get around to it I intend to have a Belding and Mull 3-power telescope placed on a .22 caliber hunting rifle.

### HUNTING IN NORTHERN ALBERTA

**I** SHALL be grateful to you if you can tell me your opinion of the 180-gr. open point bullet on big stuff, such as moose. I am glad to say I have gotten hold of a Springfield at last after a lot of trouble and consider it the best small bore rifle made, and the best cartridge. Moreover, Holland and Holland and also Rigby both write it is a good rifle and most excellent cartridge. What I like about it is that it's made by a white man! No Bosch barrel, as all the repeating rifles made here all have Bosch barrels; but no doubt about it they are beautifully made, and ditto the Austrian, but the cartridges are not such a good size.

I tried my rifle last year in Scotland with pointed bullets. I shot a few red stags with this ammunition, but I am not in love with pointed bullets. I do believe they glance off at times, say a quartering shot on the shoulder blade. But I have now got hold of the hollow pointed shells and hope to go after Wapiti next fall. I know your western country well and spent ten years of the happiest days of my life out there and hope to get back again some time. Do you think there will ever be a chance of a Springfield rifle made to handle a big cartridge—even one like Holland and Holland's .375 Magnum, which shoots a 300 gr. bullet? This is a grand rifle and no mistake and good enough for anything, if the man can shoot.

As you know, it's a mistake for a beginner to use small bore rifles in Africa on the big stuff, it's bound to get one in trouble. My friend, Major Powell Cotter, the elephant hunter I have hunted with in Africa, uses such a cartridge as a .400, but with a 500 gr. bullet and a Double Jeffrey rifle, but he had this before the .375 Magnum came out, and this rifle is made and repeating Mauser action, and is only made by Holland and Holland and I feel sure you would like it.

I wish you would be good enough to write me what you think of the country in Northern Alberta. Did you find much game there, such as moose, sheep, bear, etc., and will you be good enough to write me where you hunted? Needless to say, I will not pass this on. I went in to B. C. twice, once in '97 and again in 1911. I knew Alaska, and most of the Western states from '92 to 1900. N. W. Nevada and states N. to S. E. Oregon would be the place for mule deer and antelope, any amount of these, and a few sheep. I am anxious to get back to the Sierra Madre in old Mexico, quite a good place, especially for grizzlies. I got Rigby to fix me on stationary peep sight on the bolt of my Springfield, as I do not like it on to jar off the eyes as all the other peeps are. I always found an old billy goat was the hardest animal to kill. Do you find this so? There is a good old animal in Algeria called Aml (Mongiar tube).

H. C. N., Oxfordshire, England.

**Answer (by Maj. Whelen):** Last fall I hunted in the Rocky Mountains of Northwestern Alberta in a hitherto unexplored and uncharted region with splendid luck. On this hunt all game was very plentiful and tame, never having seen a human being. I shot a grizzly bear at 200 yards, a moose at 315 yards, a caribou at 50 yards, 2 mountain sheep rams at 150 yards, all with a single shot each. I also shot three goats at ranges from 400 to 200 yards, but while the first shot in each case anchored the animal, several more shots were required to dispatch the beast. On account of its thick skin and hide, and its very phlegmatic disposition, the goat is the hardest animal we have to kill dead with a single shot.

On this trip I used the same old Springfield sporting rifle which I have used with such good effect for the past twelve years. The ammunition was 180 grain open point, boat tail bullet, with Lubaloy jacket.

I am quite familiar with all the hunting grounds on this continent. Conditions have changed greatly since you were over there. In the Sierra Madre Mountains of Mexico the revolutions, combined with the very extensive use of the motor car in hunting, have resulted in a practical extermination of all species of game. In the United States we have good deer hunting in many localities, thanks to effective protection, but from your standpoint the only shooting worth while is that for wapiti, just south of Yellowstone Park in Wyoming. In Canada conditions are a little better. There are at least two localities where the hunting is good enough to tempt a sportsman to come from England for it. One of these is the country I hunted in last fall. This is the eastern slope of the Rocky Mountains in Alberta, about 30 miles east of the Continental Divide, and about 150 miles south of Peace River. The country was unexplored when I entered it. Grizzly bear, moose, caribou, goats, and sheep (ovis canadensis) are plentiful enough to enable an energetic sportsman with fair climbing ability to pick excellent heads. My man, Stanley H. Clark, Entrance, Alberta, is the only man who knows the way into this country. He is an excellent man to go with, and his prices are very reasonable. At least two months are required for this hunt as it takes about twelve days travel with pack train to get into the good game country. The mountain scenery is very



fine and the climate delightful. One should leave the railroad by August 20.

The other locality is the Cassiar District in Northern British Columbia. One goes by steamer to Wrangell, Alaska, and takes a small gas boat from Wrangell on August 15th up the Stikkeen River to Telegraph Creek. There is an outfitter and good guides at Telegraph Creek. From there it is a 40 or 50 day hunt. Practically everyone making this hunt comes out with fine heads of moose, caribou, goats, and sheep (ovis steuer) and all the good hunters also have bear.

I fully appreciate all you say relative to rifles for African shooting. While I have never shot in Africa, I have read and studied all the worth while books on the subject, and my own experience in America, including jungle shooting in Panama and the Philippines, has enabled me to visualize conditions in Africa quite accurately. I am advising our sportsmen going to Africa to take a Springfield for antelope, and a heavy double cordite rifle for the larger game. I tell them the big rifle is their life insurance. Where a man is thoroughly expert in the mechanism of rapid fire with the Mauser type of rifle I will concede that he will get along all right with a large Mauser like the .425 Westley Richards as well as with a double rifle. We have a great many men in this country who are thoroughly familiar with target shooting with the rifle but who know nothing whatever of game shooting—but they insist that they know all about it, and even write about it. It is such men that are continually giving idiotic advice in print on weapons to be used for game. They even counsel a .25 caliber weapon on lion. It is ridiculous. A man could use a weapon heavy enough to enable him to command the game to the extreme range at which his marksmanship will permit him to make vital hits. Nothing less than this is sportsmanlike, for anything smaller greatly increases the chance of only wounding and needless suffering. The Springfield with American hunting ammunition will permit a good shot to command all game absolutely up to 350 yards.

A great change has come over rifle making in the United States lately. Many of our sportsmen are demanding better weapons than those made in our large factories by quantity production. As a consequence a number of small rifle makers have sprung into existence who are making most excellent weapons to order, most of them using the Springfield or Mauser breech mechanism. One of these firms is now making rifles which I do not believe can be equaled for beauty of design, workmanship, and efficiency in the world. I admit that it is pretty hard to excel Holland and Holland, but I believe that this firm has done it. Their price, however, is higher than that of Holland's. Holland has cause they have to pay very much higher for their extremely skilled labor.

**WOULD** like to hear through the AMERICAN RIFLEMAN a description of the Savage .45 caliber automatic pistol. Has it passed the tests prescribed by the Ordnance Department for smaller arms? W. E. B., Topsfield, Mass.

Answer (by Maj. Hatcher): The Savage .45 caliber automatic pistol was made up and submitted to test by the Ordnance Department about sixteen years ago. The pistol was tested in competition with the Colt, the Luger, the Knobler, the Bergmann, and the White-Merrill.

The test was held at Springfield Armory by a Board which met on January 15th, 1907. The Board stated after its findings, an opinion that the Colt and Savage automatic pistols were of sufficient merit to warrant their being given a further test under service conditions.

The comparatively good showing of the Savage pistol in this test, stimulated the Colt designers into renewed activity, and resulted in the modification of the old style .45 caliber automatic into what is now known as the Model 1911.

At a later test of the two pistols, the Model 1911 was found superior, and was adopted.

A Navy Board also tested the Colt and Savage pistols, and found the Colt pistol superior. There were only a limited number of these Savage pistols made up for the Government test, and no more have been manufactured since. I have one of the original pistols which was made up for the final test, which I bought some years ago at a sale of obsolete weapons.

In outline, the pistol is exactly like the .32 caliber Savage automatic which was made for so many years by the Savage Company before the improved shape was put out.

The internal mechanism is also almost exactly like the present-day Savage automatic .32 and .38. The weight of the pistol is 2 lbs. 3 oz. The magazine holds eight (8) shots.

The weapon is a semi-hammer model, as only the serrated cocking piece appears in place of the hammer. There is a positive safety on the left, and on the right there is a latch for releasing the slide and allowing it to go forward when reloading, as it remains open after the last shot.

I have done some shooting with the model that I have. The accuracy is good enough, and the grip and balance are good. The main trouble that I can find with the pistol is that it has a much more unpleasant recoil than the Colt automatic.

The reason for the increased recoil is found

in the fact that the weapon does not have a positive system of locking the slide to the barrel, as does the Colt. There is a lug on the barrel which moves in a curved cam groove in the slide, so that when the slide goes to the rear it must turn the barrel sharply to one side. By this means the friction of the barrel in its mountings, the friction of the cam in the slide, and the reaction of the bullet in the rifling, all of which make the barrel hard to turn, must be overcome before the slide can move to the rear.

In this way a sufficient retardation of the backward movement of the slide is effected to allow the pistol to function properly.

This system of retarding the backward movement of the slide is amply sufficient for small caliber, such as the .32 and .38, but in the heavy .45 caliber, it allows the slide to move to the rear so fast that it acquires a large amount of energy which is afterwards translated into recoil when the slide stops at the rear of its movement.

#### SIX GUNS AND AUTOMATICS

**I** AM venturing to ask you for some more of your excellent advice. Now in regard to the Reising .22 Automatic which you highly recommended, do you think that the grip of this gun will make it difficult for a man to accurately handle a revolver? I have already bought a new Service .45 Colt for protection, as I certainly do like the terrific punch of the .45 Colt cartridge.

There are one or two things that I do not quite like about the .22-.32 S. & W., and have been informed by a man who has owned both that the Reising is the best buy.

I intend to start out with the .22 and later on buy a .38 Special, and just a few shots from time to time with the .45 to keep my eye in. One or two revolver fans, however, inform me that if I once get used to the automatic grip, I shall never be able to do good work with a revolver. Do you think this is so?

I notice that some very fine and excellent books are being published on rifle shooting by experts. I do wish that some one would publish a new and up-to-date book on revolvers and automatics. Himmelwright's book, while good, is nothing but a small and revised copy of an old book, and I feel sure that revolver and pistol shooters would be willing to pay more for a modern and up-to-date book similar to "The American Rifle."

As I mentioned before, I am not in love with the grip of the New Service, but as it is the most satisfactory large caliber revolver on the market, I decided to buy it.

What luck have you had with the .45 Government model? I understand that military and naval men are about 50-50 on the merits of this arm, some damning it and others claiming it to be the most practical and efficient military arm in the world. The shooting editor of *Field and Stream* wrote in the August number in this strain, claiming that he has shot his over 5,000 times without a jam, and that when it does jam it is either to a defective cartridge, or to failure of the shooter to keep the weapon clean.

But a good many shooting editors seem to think otherwise, and point out that with a revolver, a pull on the trigger will bring around another chamber if one does not have a misfire and that standard weapons will keep on shooting as long as the shooters and ammunition last.

The British, with their usual conservatism, have kept to the Webley-Fosbury, and I think that if U. S. troops had many of the small "wars" to cope with that are almost always going on in British possessions, the military revolvers would come into use again.

A. W. G., St. Louis.

Answer (by Maj. Hatcher): I do not think that you will do wrong in getting a .22 caliber automatic. You can learn the sighting of a pistol, and how to get a steady hold and a good trigger squeeze just as well from an automatic as you can from a revolver.

If you use the automatic exclusively and never practice with the revolver, you would find the grip strange if you were called upon to use the revolver in an emergency. But if you do a little shooting with the revolver once in a while, this difficulty will not exist.

I believe that it is important for any shooter to get used to the grip of an automatic as well as the revolver.

I do not believe that you made any mistake in getting the New Service revolver. While the recoil of the load is disturbing to some people, it really is not bad when you get used to it, as you soon learn how to hold the revolver so that the recoil does not jar the hand at all.

For practice with the New Service, it is very pleasant to use a reduced load which cuts down the recoil.

It is true that the Military and Naval men among whom we may call the gun crank class, are about fifty-fifty on the merits of the Government model automatic. Those that do not like it are in general men who learn to use the revolver first, and never have really learned the automatic well.

However, when a military revolver shot does make up his mind to give the automatic a really

good tryout, and finally learns to shoot it, he usually becomes enthusiastic about it. This is the case with some well known revolver shots, such as John Dietz.

It has been my experience that there are no more mechanical troubles with the automatic than there are with the revolver. Those who are engaged in pointing out the disadvantages of automatic pistols, rarely ever mention the troubles, such as broken hand springs, and broken hammer noses, that are encountered in revolver shooting. But anyone who has had much experience in the Army with target practice where a great many revolvers are used at one time, will recollect a large number of such troubles.

During the War a great many British officers told me that their greatest ambition during the years they were in the trenches, was to obtain possession of a Colt automatic, and when one officer had obtained one, he was very much envied.

I believe as a practical weapon for war use, the automatic is better than the revolver, but for use such as you contemplate, I believe I prefer a revolver, as it is safer to leave around, and is probably somewhat more accurate.

#### A FRENCH HANDGUN

**A** FRIEND, a short time ago, obtained a French Army revolver and we cannot determine its caliber.

The gun is well made but rather awkward and clumsy in appearance, yet balances well. Gun is double-action, with smooth pull. Shells are ejected at the right side through a gate by a rod, somewhat as in the S. A. Colt. On the top of the barrel is *Modle 1873*, on the frame *Mre d'Annes, St. Etienne*. A .44 Special fits the chamber, but projects beyond. Grips are walnut, and barrel is 4 1/4 inches, octagonal.

This gun is assuredly not 8 mm., which I read is French regulation, and it also seems less than the 12.7 mm., which last shell I have seen advertised as for French Army revolvers. I once saw a similar gun, and the one cartridge with it was quite short and stubby, center fire.

Could you identify this gun and cartridge?

P. H., Minneapolis.

Answer (by Maj. Hatcher): The revolver you describe is the French Service revolver, Model of 1873. The caliber is 11 m-m., which figures out to .432 in., or just three one thousandths of an inch larger than the .44 Special. The cartridge is common enough in Europe, but I have never seen it in this country. The revolver is called the "Chamelot-Delville," after the designers. Your sample was made at the Government arms factory at St. Etienne.

#### RELOADING FOR THE .38

**M**AY I ask you a few questions? I have purchased a new Officers' Model Target Colt 7 1/2 in. barrel, shooting the .38 S. & W. special. What do you think of this gun?

The ammunition for this at the stores is rather expensive, so I would like to try to reload. I am thinking about purchasing a mold block from the Bond Tool Co., as I already have the handles, but they want \$4.00 for the mold blocks, and \$5.85 for extra equipment for S. & W. special to go with any .30-06 tool. They also want \$12.00 for a bullet sizer and lubricator. Do you think I can do any better than this?

How do you like the Du Pont No. 5 pistol powder, or what would you recommend? What amount of lead and tin would you use? I have found one of the lines at the store No. 1 1/2 Winchester compound primers at 40c per 100. I do not know how old they are, but they look all right.

How many grains of No. 5 powder would you use with a 158-grain bullet? Also with Bull's-Eye Powder? L. C. P.

Answer (by Maj. Hatcher): The .38 Officers' Model Colt, and the .38 Smith & Wesson Military and Police, are the two best and most accurate target revolvers made. A choice between them is merely a matter of personal preference.

You will have to purchase the mould and extra parts for your reloading tool from the Bond people.

If you do not want to go to the extra expense of buying the bullet sizer and lubricator, you can do without this article and still do satisfactory reloading, as the loading tool has a sizing die, and the bullets can be lubricated by standing them in a pan and pouring the melted lubricant around them. After the lubricant has solidified, the surplus is removed, leaving the grooves full.

If you can afford it, the bullet lubricator and sizer is a very great convenience, and is well worth the money.

DuPont Pistol Powder No. 5 is as good as any pistol powder on the market.

With the 158-grain bullet, use a charge of five (5) grains of Pistol Powder No. 5, or three and three-tenths (3.3) grains of Bull's-Eye.

Bullets should be cast of one (1) part tin, to fifteen (15) parts lead.

I have no doubt that the Winchester primers which you speak of will be found to be all right.

# Do You Know How to Clean a Gun?



Do you know that the vast majority of gun users do not know how to clean?

Do you know what causes after-corrosion in firearms?

You do know that Major Townsend Whelen knows how to clean all firearms—but do you know that he has written a booklet

## "THE CARE AND CLEANING OF MODERN FIREARMS"



which gives in detail the most modern methods of cleaning, and that a copy of this will go to you upon receipt of Twenty-five Cents?

Did you ever stop to think why so many guns put away in apparent safety were ruined when gotten out a few months later?

Do you know what you are using for cleaning and preserving your valuable pet firearm, or do you take anything the clerk in the sporting goods store hands you?

How sure are you that your cleaning materials are efficient and that in a few months your pet gun will not be ruined like so many others are ruined every year by using inferior materials?

Do you know that STAZON PRODUCTS were adopted by the National Rifle Association because they passed severe tests by the Navy, Army, Marine Corps, U. S. Government Bureau of Standards, and others?

Look at your guns now—if rusty STAZON-RUSTOFF will remove it and STAZON GUN OIL or STAZON (gun grease) will keep them in perfect shape.

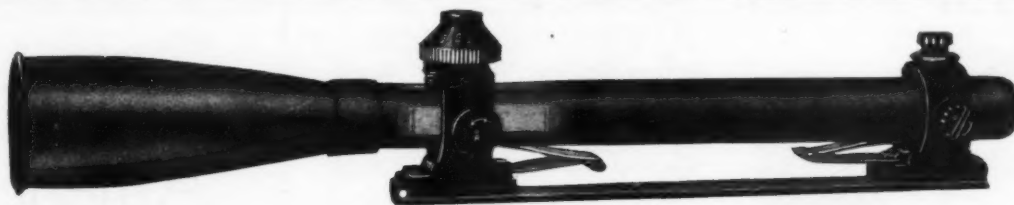
If your dealer does not handle STAZON PRODUCTS, send us his name and \$1.00 and we will mail you a full size container of each of our four products.

### CONVERSION PRODUCTS CORPORATION

Philadelphia Stock Exchange Building, Philadelphia, Pa.

MANUFACTURERS OF STAZON, STAZON RUSTOFF, STAZON GUN OIL, AND STAZON POWDER SOLVENT





## Reduction in Price of Belding & Mull Scopes

Owing to the rapid increase in the volume of our sales, we are enabled to manufacture in larger quantities, and are giving our customers the benefit of the reduced cost.

Our HUNTING SCOPES, in 2 $\frac{1}{2}$ , 3 and 4 power, possess the following features which make them especially adapted for hunter's use: Universal focus, Very large field, Waterproof and Shockproof. The Reticule is a substantial pillar, and the Eye relief is 3".

Our TARGET SCOPES are focused for different ranges by moving the erector lens. This accomplishes with only one movement, the double purpose of eliminating parallax and focusing for range. One great merit possessed by our target scope is the great latitude of eye position; there being over 6" of latitude (fore and aft).

All our scopes have the highest possible grade of lenses wherein lies the explanation of their slightly higher price.

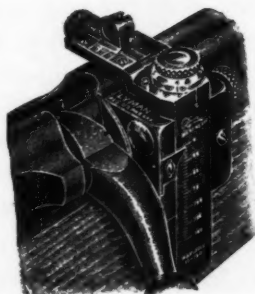
Write today for revised price list.

Philipsburg

BELDING & MULL

Center County, Penna.

## LYMAN SIGHTS Better Your Aim



No. 48 Lyman Micrometer Receiver Sight for Springfield 1903, 1906; Newton; Krag; Remington Model 30; all Mausers; B. S. A. Sporting Rifles; B. S. A. .22; Free Rifles with Martini Action; Ross Model 10, cal. .280. Price, \$11, without disc; \$11.50 with disc. Tap and drill for mounting, 50c.



No. 1A  
for popular  
sporting rifles,  
\$4.50



No. 2A  
With Disc, \$5.



No. 3  
Ivory Bead  
Front Sight  
for all rifles  
taking regular  
rifle type of  
front sight. \$1.



No. 5B  
\$1.75



No. 26  
Ivory bead  
Front Sight;  
carpine type;  
\$1.00



No. 17  
Target Front,  
\$2.50

**B**ACK in the early seventies William Lyman worked out the Lyman Principle of Rear Aperture Sighting and founded The Lyman Gun Sight Corporation. The remarkable accuracy of Lyman Sights is but the natural sequence of more than 40 years devoted to their development and perfection.

Write for our latest folder "Better Aim at Target or Game."

Lyman Sights for practically any of the popular rifles, American or foreign, can be had through your dealer; or give us his name and your make, model and caliber.

The Lyman Gun Sight Corp.,  
90 West Street  
Middlefield :: :: Conn.

Look for this MARK



or the name LYMAN

## Medals for Club Matches



Distinctive medals for club matches are useful PRIZES THAT LAST.

Well arranged rifle and pistol programs which offer correctly-made medals will stimulate interest in club activities and increase the membership.

Our business is to satisfy these requirements—to conscientiously serve your club.

Medals supplied and specifications for new medals promptly attended to.

**The American Metalcrafts Co., Inc.**

Medal Makers for the N. R. A.

Sales Department

718 Woodward Building

Washington, D. C., U. S. A.





**Stevens No. 10 Target Pistol.** A .22 caliber single-shot with all the Stevens accuracy. 8-inch barrel, weight 36 ounces. Distance between sights 10 inches. Combines superior shooting qualities of a single-shot with grip and balance of an automatic.

**Stevens 414 Ideal "Armory" Model** .22 short and .22 L. R. 26-inch round, take-down barrel, automatic ejector. Walnut stock, steel butt-plate. Length 13 inches, drop 3 inches; large fore-end, large hand hold; fitted with strap loops, weight about 8 pounds.

## It takes more than just skill

It takes skill and an *accurate* firearm. And that's why for 59 years Stevens, first and last, has made a religion of accuracy.

Not accuracy of the moment—but accuracy that endures—lifetime accuracy.

There's Model 414 (Ideal "Armory"), a favorite on the range of many of the most skilled small-bore riflemen of the country.

If you have never tried a Model 414, get a friend to let you try a few shots with his. You will find plenty of men you know using this rifle, and once you try it out yourself, you'll understand why.

Stevens makes a complete line of sturdy, accurate .22 rifles, single and double shotguns, and target pistols.

Ask at your dealer's or write direct for our interesting catalog.

J. STEVENS ARMS COMPANY

Dept. 515, Chicopee Falls, Mass.

Owned and Operated by the Savage Arms Corporation

# Stevens

59th year — largest manufacturer of shotguns in the world

## The American Rifle

by

Maj. Townsend Whelen

The supreme authority on the Rifled Tube.

The book which is the prime essential of every shooter's library.

Even before he acquires a rifle, the man who desires to enter the shooting game should obtain a copy of this book. It will aid him in choosing the type of rifle best suited to his target practice or hunting needs. It will guide him in choosing his sighting equipment and accessories.

After he has determined upon a rifle, sights and accessories it will prove the most valuable compendium of information possible to obtain in one volume on all matters pertaining in general to interior and exterior ballistics and to various standard, special and reduced loads in particular.

PRICE \$6.00

Order The American Rifle  
through  
The American Rifleman

1108 Woodward Building  
Washington, D. C.



### Every Man and Boy Wants this Equipment

Any man or boy will be tickled to own Marble's Game Getter Gun. It's both rifle and shotgun—upper barrel .22 cal., rifled; lower barrel .44 cal. and .410 ga., smooth bore, for shot, or round ball. A reliable .22 for birds, rabbits, etc.—the smooth bored barrel almost equals a 28 ga. shotgun.

**Prices: Tax and Fine Leather Holster Included**  
12 in. barrel \$25.50; 15 in. \$27.00; 18 in. \$28.50

**Waterproof Matchbox.** Carry one and always have a light—keeps matches bone dry, even under water. Seamless brass, nickled—size little over 3/4" inside diameter. List price 60c.

**Woodcraft Knife.** All-purpose knife for every use—4 3/8 in. blade finest steel, checkered at back to give firm grip. Thousands of Boy Scouts and outdoor sportsmen own these knives. List price, including fine leather sheath—No. 49, Leather handle, \$2.25. No. 50, Staghorn Handle, \$3.00. Add 10% war tax.

**Safety Pocket Axe.** Handiest tool made—guard folds into handle. Easily carried in pocket or belt—every outdoor man and boy wants it. No. 2, 11 in. steel handle, \$3.25. No. 5, selected hickory handle, \$2.00.

Most dealers sell Marble's Outing Equipment—if your dealer can't supply you, order direct. Ask for interesting catalog.

**Marble Arms & Mfg. Co.**

502 Delta Avenue

Gladstone, Mich.

## MARBLE'S Outing Equipment

FOR EVERY HOUR

IN THE OPEN

## FIALA PAT. SLEEPING BAG

Weights 5 1-2 lbs.—warm as 30 lbs. of blankets. No hooks, strings or other crude contraptions.

**Read What They Say:**

"Without doubt, you have the best light weight bag on the market." Dr. C. P. Fordyce.

"After 23 years camping in nearly every part of our country—trying out many kinds of sleeping bags, I can congratulate you on having the lightest and warmest bag I have ever seen." J. M. Murdock.

**FIALA Outdoor Sleeping Suits** of pure "Angora" worsted.

**FIALA Parkas and Sweater Coats** for Skiing and Mountaineering.

**FIALA High Grade 22 cal. Combination Rifle and Pistol**, with 3 barrels, a \$30 Rifle for \$18.

Write for descriptive circulars

Anthony Fiala, 25 Warren St., New York  
FIALA OUTFITS Inc.

## Shooting Accessories

Everything to interest a rifleman. Send for my No. 6 Catalog, just out, showing over 200 cuts and complete Price List.

**P. J. O'Hare**

178 Littleton Ave. Newark, N. J.

## ENGLISH DOUBLE BARREL EXPRESS RIFLES

One .450 Rigby Double Barrel Hammer Express Rifle, in excellent condition, \$75.00. One Double Barrel Hammer .303 Holland & Holland English. One of the very highest grades and a splendid example of the best English workmanship, well engraved, safety locks to hammers, in perfect condition, \$150.00. Box R. A., c-o "The American Rifleman."

## SPRINGFIELD SET TRIGGERS

Double Set Triggers fitted to your Springfield trigger guard, complete with Sear knock-off and Sear spring, \$15.00.

**L. NUSSLEIN**

1117 14th St. Washington, D. C.

## U. S. Government Marching Compass as Illustrated While They Last \$1.75

These are new compasses made by Sperry Gyroscope Co., Brooklyn, N. Y., for U. S. Government. Dial is suspended in spirits, focusing eyepiece, luminous dial. Furnished with plush lined leather case at \$1.75, value \$24.50. No catalogs. Immediate shipment.

**Stockbridge Sporting Goods Co.**

Stockbridge

Dept. R. A.

Massachusetts

Made by the Birmingham Small Arms Co., Ltd.  
The Name Guarantees Quality and Accuracy



## B.S.A. Scientific Cleaners

Are Indispensible to Every Owner of a Rifle,  
Shotgun or Pistol

### INSURE LONGER LIFE AND BETTER SERVICE

**B. S. A. Safetipaste**—A wonderful protection against rusting of iron and steel.

**B. S. A. "Cunirid"**—An abrasive paste for removing metallic and other fouling from the bore of the barrel.

**B. S. A. "Kleenwell" Oil**—A thin alkaline oil for washing out the bore after shooting or after the use of "Cunirid".

Our new booklet, "Scientific Cleaning of the Barrels of Modern Firearms", contains most interesting and authoritative information—the kind of pointers that are of genuine service to shooters. Your copy mailed, on request.

### Production Equipment Co., Inc.,

SOLE U. S. REPRESENTATIVES

Dept. 19

91 John Street

New York

Canadian Representatives: Fraser Co., 512 Peel St., Montreal, Canada

Now on the Press

Order Your Copy Today

## The Kentucky Rifle

By CAPTAIN JOHN G. W. DILLIN

No Firearm played a more important part in the winning of North America for Americans than did the long-barreled Kentucky rifle.

Little has been known about these wonderfully accurate weapons and their makers. But now historical and authentic data has been collected by a rifle enthusiast and woven into a narrative of compelling interest, profusely illustrated with the finest of plates from photographs of hundreds of the best examples of the early American gunsmiths' art.

Price \$6.00

Postpaid

Published by

THE NATIONAL RIFLE ASSOCIATION

1108 Woodward Building

WASHINGTON, D. C.



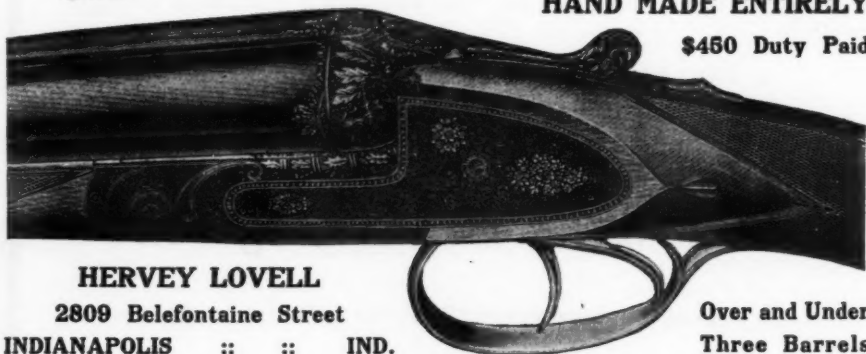
## Compare This Quality with English Makes at Double This Price

12 and 20 gauge  
ejector

.360-.400-.450-.577 or .600 caliber rifles

HAND MADE ENTIRELY

\$450 Duty Paid



HERVEY LOVELL

2809 Belefontaine Street

INDIANAPOLIS :: :: IND.

Over and Under  
Three Barrels

Magnum Mausers and Free Rifles, Accuracy Guaranteed

## GRIFFIN AND HOWE, INC. Rifle Makers

234 and 236 East 36th St., New York, N. Y.

Springfield, Mauser, and other rifles remodeled and restocked a specialty. The members of our firm have had ten years experience in this line of work and we are prepared to execute it in the best possible manner and in the shortest time. We use only the highest grade of imported French and Circassian walnut, selected for strength, and priced according to grain and figure. One of our remodeled Springfield sporting rifles recently made a 20 shot possible at 1,000 yards. We are prepared also to furnish all varieties from the accepted standards, and all accessories, such as: Cheek pieces, thick combs, beaver tail forearms, English buffalo tipped forearms, checked and engraved steel butt plates with trap, steel pistol grip caps with trap for front sight, ramp front sights, barrel bands, sling swivels, Whelen gunslings, etc. We have our own engraver in our factory and make a specialty of fine engraving, monograms, and gold and silver inlay work. We can also furnish special barrels of any weight and dimension for the Springfield cartridge or for other cartridges which the actions will handle, and we hope soon to be able to announce Poldi Anti-Corro Barrels. In addition to our regular circular we are publishing a special price list on remodeling rifles. Send name and address on postal for both.

## FECKER TELESCOPIC SIGHTS

ready for immediate delivery as follows:

6 and 10 power in 18 inch length,

Price, \$30.00

6, 8 and 10 power in 22 inch length to

fit Springfield Rifles

Price, \$30.00

8 power in 20 inch length

Price, \$22.50

J. W. FECKER

5606 Euclid Ave. Cleveland, Ohio

## INSTRUCTIONS IN LEARNING ACCURATE PISTOL SHOOTING

By Gunnery Sergeant John M. Thomas

Single copies and under ten, fifty cents each. Address orders to Gunnery Sergeant John M. Thomas, Rifle Range Detachment. Parris Island, S. C.

## SUPER-RIFLE FOR MATCH RIFLEMEN

Realizing that the free rifle game and modern long-range competitive shooting demand a type of target rifle now very difficult to obtain, I am undertaking to assemble and supply such a rifle. At present I am assembling a lot of ten rifles, for which my price will be \$175.00 each. These rifles will have special cal. .30 (Gov't Mod. '06) heavy barrels, in Springfield receivers; pistol grip stocks, palm rests; double set triggers; my own style butt plate; sheepskin cheek pad; Lyman No. 48 rear and aperture front sights; 'scope blocks, etc. They will be very similar to the rifles I have used in the International Matches, and will embody every feature that I consider requisite in an arm of this type. Each will be carefully assembled and proved by me personally and will bear my proof mark and guarantee. As accurate and well adapted target rifles they will have no superior in the world. I shall have but the ten ready for delivery this winter. Orders will be accepted only from members of the N. R. A.

WALTER R. STOKES,

508 Clifton Terrace, So., Washin ton, . C.

# A Gift For 100 Per Cent Americans

**S**HOOTING in some one of its branches—at the target, in the big game woods or afield—strikes a responsive cord in every red-blooded American. The shooting fraternity is made up of the kind of good sportsmen your own friends would enjoy. The absorbingly interesting sport they follow is reported twice a month in

## The American Rifleman

### The Foremost MAGAZINE in the Shooting Field

A subscription starting January 1 is a peculiarly appropriate Christmas Gift from one real American to another.

If he is not a shooter he will enjoy the spirited stories over which far camp fires cast a glow, and will become acquainted with the inner workings of the true American National Sport. If he is a shooter, in addition to the wonder tales of hunting, there will be opened to him a compendium of ballistics and general shooting dope impossible to duplicate elsewhere.

THE AMERICAN RIFLEMAN today stands for the best in sporting publications. Every number is made up of carefully selected contributions from a staff of writers than whom none are better fitted to speak with authority in their own fields.

The special free services conducted for the benefit of our readers have proven of the greatest benefit to those interested in marksmanship and kindred subjects.

With the coming months there will be inaugurated several new departments, while the general high standard of the magazine's contents and makeup will be further improved.

### Send a Christmas Subscription to a Friend

PLEASE SEND

## The American Rifleman

TO MY FRIEND

NAME ..... ADDRESS .....

CITY ..... STATE .....

\$2.00 per year to members of the N. R. A. or  
affiliated clubs; to others, \$3.00. Canadian  
subscription, \$3.50.

(Signed) .....

## APPLICATION FOR INDIVIDUAL MEMBERSHIP IN THE NATIONAL RIFLE ASSOCIATION of AMERICA

Brig. Gen. FRED H. PHILLIPS, Jr., Secretary,

1108 Woodward Building, Washington, D. C.

Sir:

I hereby request favorable consideration of my application for \_\_\_\_\_ membership in the  
National Rifle Association of America, and enclose herewith \_\_\_\_\_ Dollars, being fee for same.

I certify that I am a citizen of the United States. Age \_\_\_\_\_ Born \_\_\_\_\_  
in the County of \_\_\_\_\_, State of \_\_\_\_\_

Name \_\_\_\_\_ Address \_\_\_\_\_

Business \_\_\_\_\_ City \_\_\_\_\_

State \_\_\_\_\_ Recommended by \_\_\_\_\_

### Different Memberships

Benefactor, \$1,000; Patron, \$500; Life, \$25; Annual, \$2.00; Junior, 50 cents.

ANNUAL MEMBERSHIP EXPIRES WITH THE CALENDAR YEAR.

## WANTS AND FOR SALE

The uniformly excellent returns from advertisements appearing in the classified columns of THE AMERICAN RIFLEMAN make it a most satisfactory and productive medium for the disposal of surplus shooting equipment, or the acquisition of special types of firearms.

**Free Insertions.** Each subscriber is entitled to one insertion of one-half inch, when his subscription is paid up for one year. It is necessary only to write or print the text plainly, noting thereon the date subscription was paid. These advertisements will appear in the first available issue and should be in publication office two weeks prior to the following publication date.

**Paid Insertions.** Non-subscribers or those who have already made use of the subscriber's privilege may take advantage of these columns at a cost of \$1.00 per inch or part thereof. No advertisement for less than \$1.00 accepted. Advertisements will be set in 6 point solid. They should be in the publication office two weeks prior to the time appearance is desired.

**ANTIQUE AND MODERN FIRE-ARMS** (New and used) sold, exchanged, and bought. Large stock—reasonable prices! Stephen Van Rensselaer, 873 Madison Avenue, New York City.

Springfield remodeling of the highest order. Hand-made stocks of the finest Italian and Circassian Walnut, as you want them. English made Anson & Deely ejectors. Scroll and flower engraved. To your order in four months.

Owen Bros., Sauquoit, N. Y.

**FOR SALE**—Beautifully stocked and engraved .360 (9 m. m.) double express rifle, hammerless, Krupp barrels, with 110 cartridges (more obtainable, or rifle can be easily rechambered for .35 Winchester cartridge), auto. ejector, manufacture of H. Mahillon, Brussels. Cartridges carry 300 grain soft point metal jacketed bullets with Rifle Ballistite to give about 2500 f. s. A rare and desirable big-game gun, imported new and never fired; cannot be duplicated for \$350. Will sacrifice for \$150. Will be shipped subject to examination on \$25. deposit returnable if rifle is not accepted. Would consider Winchester 52, 22 Springfield, or spotting telescope in trade. Lieut. A. M. Siler, 16th Inf., Fort Wood, N. Y. Harbor.

**WANTED**—Ballard actions with double set triggers, engraved actions preferred. C. L. Merlich, Vaughnsville, Ohio.

**HAND LOAD** your shells with **BOND TOOLS.**

**CATALOG AND HANDBOOK** mailed on receipt of 10 cents.

**MODERN-BOND CO.**

813 West 5th Street  
Wilmington, Del.

**FOR SALE**—One 30-06 Neidner Free Rifle. Outfit has a heavy 30 inch Neidner barrel, globe front sight, Lyman 48 rear with special graduations for the 300 meter course. 1922 model stock with Swiss butt plate, double set triggers and adjustable palm rest. This outfit is new and very accurate. \$125.00. Lawrence Neusslein, 1117 14th St., N. W., Washington, D. C.

**GIVE YOUR CHILD A FIGHTING CHANCE** in these days of STRENUOUS competition. A Good Penman is given preference for all positions. Dr. Bevis' Aluminum System of Tracing-Pennmanship-INSURES EXACT FORM OF LETTERS, CORRECT MOTION and TIME. The child cannot do it wrong. He MUST WRITE RIGHT. Complete set \$1.00; 3 sets \$2.25. Nat'l Educators Assn., Colo. Branch, 1115 No. Custer St., Colorado Springs, Colo.

**WANTED**—1903 Springfield or .35 cal. Winchester 95 in exchange for 455 British Webley revolver in excellent condition with about 200 cartridges and holster. Rifle must be in like condition. C. H. Reed, Box 400, Heutzdale, Pa.

**FOR SALE**—L. C. Smith Ideal Grade 12 ga., 0-inch full choke, auto. ejector, single trigger. Perfect, like new, \$65. Savage 1919 .22 L. R. converted sporter, scope blocks, slings, 2 mag. like new, \$15. Colt .380 Auto. pistol, like new, with Heiser holster, \$15. S. & W. .22 Cal., heavy frame target revolver, brand new, with Heiser hand-stamped holster, perfect, \$25. Stevens .22 L. R. target pistol, 8-inch, brand new, \$8. All guaranteed as represented. NO TRADES. P. O. order or draft only. L. H. Wohlenberg, care Iowa State Sav. Bk., Lyons, Iowa.

**FOR SALE**—Colt's .38-40 Single Action 7¼-inch, with Heiser holster, all in fine shape, \$20. Krag Rifle with sling, bore in good shape, \$10. One pair Colt's Ivory grips for single action, new, \$9. Extra .38-40 cylinder, \$2. One copy Winan's "Sporting Rifle," new, \$3.50. Sharp's Borchardt Rifle, .25-20 Peterson barrel, inside perfect, \$10. Stevens' 6 inch Diamond Model Pistol, new, \$8. **WANT** July 15, 1921, copy of "Arms and the Man." Will pay 25 cents. L. M. Massey, 337 East 2d St., Sheridan, Wyoming.

**FOR SALE**—Heavy barrel Springfield Star-gauged, pistol grip, Lyman 48 B receiver sight, Winchester 5-a telescope. Gun alone cataloged at \$71. Has been shot less than 50 times. Will sell as described above for \$70. cash. Harry Smith, Box 194, Starks, Nevada.

**FOR SALE**—Bullard rifle, .40 cal. round, 26 inch barrel, case hardened frame, peep sights, 300 cartridges, Remington Hepburn, .32-40, Remington cartridges, 26 inch round barrel Swiss butt, cheek piece and peep sights, no rear slot in barrel. Both have fine selected stocks and are in a-1 condition, inside and out. Write and make offer. F. V. Allen, P. O. Box 86, Camden, South Carolina.

**FOR SALE**—One 1912 20-gauge Winchester pump, brand new. One Ballard action set triggers. Lawrence H. Latinske, 201 Seymour St., Wausau, Wisconsin.

**FOR SALE**—Small bore outfit complete .414 Stevens .22 long rifle with Winchester 5-a scope and Kerr Webb sling. All in first class perfect condition or no sale. Price \$35. T. W. Adams, Care Lincoln Iron Works, Rutland, Vermont.

**FOR SALE**—New cornet, Werlitzer \$25. Cost \$40. New pedometer, \$1. or will trade for firearms, powder scale, or other sportsmans articles. Give or take difference. H. V. Padnos, Redfield, S. Dakota.

**RIFLE RESTOCKING AND REBLUING**—We rebuild your military rifle in a sporting model and make it shoot as straight as your barrel is good. All rifles given target and working tests before shipment. W. R. McCay & Son, 339 Morton St., New Castle, Pa.



**FOR SALE**—50 Remington Navy Pistol, single shot, in excellent condition, with complete reloading outfit consisting of mould, bullet sizer, shell resizer, powder measure, loading chamber and tool, 60 specially made cases, also belt, holster and some spare parts. More accurate and powerful than the Colt .45 auto. \$45.00. Experimental Model .45 Savage Automatic pistol No. 141. One of the few that were made for the Government test. Fine-shooting pistol \$25. "Straightline" loading machine, ideal, with Krag equipment, \$78.00. J. P. Lower .32 rim-fire revolver, heavy frame, single action sheath trigger, 6-inch barrel. One of the "Infringement" revolvers of the early '60s. No name or date on gun. Good condition for its age, \$12.00. Ideal 8-ball Armory mould No. 408274, good, \$6.00. 22 Stevens "Off-Hand No. 35" pistol, 6-inch barrel, fair, \$5.00. 45-70 Springfield carbine, good, \$5.00. Ideal bullet sizer and lubricator, .308 die, \$5.00. 45-70 Ideal D. A. reloading tool No. 3 with extra chamber, \$4.00. Ideal powder measure No. 5, \$3.50. Ideal powder measure for shotguns, \$1.00. 45-70 shell resizer, \$1.00. 45 Colt shell resizer, \$1.00. Ideal Handbook No. 16, \$1.00. 45 Auto. shell resizer, \$1.00. B. K. Wingate, 448 Birkle Ave., Bethlehem, Pa.

**FOR SALE**—Fine Buffalo Robe with cloth lining. Price \$50.00. This is a good one. J. G. Dillin, 102 W. Front St., Media, Penna.

**WANTED**—Position as manager of Guns and Ammunition Department in Sporting Goods Store, by experienced man, with thorough knowledge of same. Address "M", care "The American Rifleman."

**A BARGAIN**—Brand new, never shot, Ithaca No. 4 grade, Auto. ejectors, Jotsum recoil pad, 12-ga., 30-inch, modified and full, stock 14 inches, 2 3/4 inches, 1 1/2 inches. Beautiful engraving, checking, and stock. Cost \$125.50. Sell for only \$100.00 cash. Affidavit if you want it. Also fine new case. Cost \$19.00, only \$10.00. Address "Ithaca," care "The American Rifleman."

**FOR SALE**—Winchester 5-A Telescope Sight with mounts, and Pecker eyepiece, increasing power if desired. A-1 condition. Price \$25.00. R. H. Betts, Glenside, Pa.

**FOR SALE**—One Winchester Model 94, 30-30 Lyman Sights front and rear. Excellent shape, practically new, fired less than 100 shots. Also one .303 Ross rifle in excellent shape, 50 rounds ammunition goes with gun. The first \$15.00 takes it. Clarence A. Peterson, Murdo Trail, Midland, S. D.

**WANTED**—Single Action Frontier Colt, 5 1/2-inch barrel, .45 caliber, or what have you in this model cheap? Allen W. Moyer, 1008 Stirling St., Coatesville, Pa.

**WANTED**—Reloading tool for .45-70 Springfield. State make, condition, and price. Also what weight of bullet mould is for. Russel O. Jennison, Box 23, Salt Creek, Wyoming.

**FOR SALE**—One heavy barrel Springfield Match rifle, new, never fired, gold bead front, Lyman 48 rear, Winchester A-5 telescope sights, \$75.00. Vion spotting scope 40 power, practically new, \$20.00. Pair 6-power type EE U. S. Army Binoculars, good as new, \$20.00. Lt. R. S. Tichenor, Princeton, Indiana.

**TRADE**—One new Remington Russian rifle 7.62 cal., remodeled, polished stock, barrel 20 in., two boxes cartridges. One 6-X Blasco almost new. WANT .45 Army Automatic, also one 7-X Prism binocular, fine shape, with case for .38-40 S. A. Colt. W. S. Jacobs, 801 Garfield Ave., Mt. Vernon, Washington.

**WANTED**—A good double barrel hammer shotgun, 10 bore, for wild fowl, preferably Remington. Will trade modern or antique firearm or cash to suit purchaser. What have you? Major Jerome Clark, care "The American Rifleman."

**FOR SALE**—One Ideal Lubricator and sizer for 30-06 with two moulds and two dies (308329-308241), the lot \$10.00. One Winchester S. S. 40-60 set trigger, new condition, \$15.00. One Springfield action barrel, worn, action complete, \$15.00. One Stevens Lord Model pistol, barrel perfect inside, \$10.00. 500 30-06 ball cartridges, \$7.50. One Colt's .31 cal. cap and ball revolver, engraved cylinder, \$8.00. One Remington .44 cal. revolver relic, \$2.50. One 12 mm. pin fire revolver relic, \$2.00. One 20-gauge muzzle loader single barrel Shotgun, good shooting order, \$5.00. C. C. Snively, Hopkins, Minnesota.

**FOR SALE**—One Springfield, condition good, \$15.00. One Sporting Springfield, 48 Lyman rear, \$25.00. One Spotting Scope \$10.00. H. E. Dodson, 550 Humboldt St., Rochester, N. Y.

**FOR SALE**—Winchester .25-36, fine, \$20.00; 2 Win. 5-A Scopes, No. 2 Mounts, brand new, \$24.00 each. Parker 12-ga. 2 Match Springfield. Krag Carbine, all nearly new, priced to sell. WANT Repeating Shotgun, No. 45 Lyman Scales, Spotting Scope, tools. J. E. Brownlee, Lamar, Colorado.

**FOR SALE**—Heavy 8-inch barrel, single shot Remington Target Pistol, chambered for .22 short, easily chambered for Long Rifle if you prefer. This is one of the old-timers and has exceptionally fine trigger pull. It is in fine condition and capable of making fine groups. Sell for best offer. H. F. Crofut, Hoffmans, N. Y.

**BARGAINS**—In used glasses. 6-X Prism Monoculars by Leitz, Busch, Hensoldt, and others, \$7.00. 8-X Prism Monoculars by Leitz, Busch, Hensoldt, and others, \$8.00. 6-X Prism Monoculars, by C. P. Goerz, \$10.00. 6-X Prism Monoculars by Carl Zeiss \$12.00. 8-X Prism Monoculars by C. P. Goerz \$12.00. 8-X Prism Monoculars by Carl Zeiss \$14.00. Carl Zeiss Prism Binoculars with individual eyepiece focus, with case as follows: 6x24 at \$24.50; 6x30 at \$28.00; 8x30 at \$35.00; 10x50 at \$65.00; 12x50 at \$72.00. Carl Zeiss Prism Binoculars with central adjustment, as follows: 6x30 at \$40; 8x30 at \$45.00; 6x24 at \$35.00; Leitz Prism Binoculars in 7x50, 10x50, or 12x50 at \$55.00 each; 8x40 Carl Zeiss Fieldglass Binoculars, individual eyepiece focus, pupillary adjustment, case at \$14.50. Marbles Goods: 60-Cent Marbles Rifle Cleaners, any caliber except .22, at 40 cents. Marbles \$1.00 Field Cleaners at 60 cents, any caliber except .22. Rust Ropes 40 cents, any size except 12 gauge. \$1.00 Marbles Shotgun Cleaner, any gauge except 12, at 60 cents. Marbles \$1.25 Shotgun Full Thru, any gauge except 12, at 80 cents. Pearl Grips for Pocket Revolvers, \$1.25; Winchester 16x28 Full Choke Barrel, \$8.00. Ithaca 12x30 barrel, new condition, \$12.00. No catalogues. Stockbridge Sporting Goods Co., Stockbridge, Massachusetts.

**WILL BUY** rifles or shotguns. Give description in full with lowest price. Will trade .20 gauge Marlin hammerless pump, like new, for 12 gauge pump. A. W. Hecker, 523 Oakwood St., Pittsburgh, Pa.

**WANTED**—Bond bullet sizer and lubricator, with dies for 30-06 or .303 British. Bond Moulds A-311-870 and A-314-870. Also jacketed bullets for .30 '06 150 grain and 170 grain. E. T. D. Francis, Crawford Bay, British Columbia.

**WANTED**—Marlin Trap Grade, with block release on top of receiver. Must be in gun crank condition. Give full description and dimensions. Lyman No. 103 for Marlin 35 Sale: Lyman No. 52-A \$4.00, R. L. Sheeler, 2421 West Broadway, Council Bluffs, Iowa.

**FOR SALE OR TRADE**—7 mm. Mauser (Waffenfabrik) Lyman front, tangent curve rear, rubber recoil pad, 100 empties. Perfect, \$30.00. Too powerful. Or trade 25 rim-fire Marlin, same condition. Might consider .25-35 Remington. Earl L. Bradsher, 716 Union St., Baton Rouge, La.

**WANTED**—Star-gauged Springfield. State condition and price in first letter. Theo. Randau, Crystal Lake, Illinois.

**FOR SALE**—30-30 Remington pump, in good condition, \$25.00. Thos. G. Mills, 2183 Elston Ave., Chicago, Illinois.

**FOR SALE**—One Ideal Universal Powder Measure No. 5, new, \$4.50. One Ideal full length sizing tool, cal. .30, 1906, new, \$3.50. One Yankee Adjustable Reloading Tool cal. .30, 1906, complete, new, \$5.00. One set Bond Scales, accuracy 1-10 inch grain, complete, new and perfect, \$17.00. J. S. Rogers, Florence, Wyoming.

**FOR SALE**—The following arms, all new and in their original packing: One 22-32 Smith & Wesson, 6 inch Target Revolver, Beakhart Model, \$26.00. 2-22 10-inch Olympic Model Target Pistol, Pertridge sights at \$23.00. One 22 Colt Automatic Target Pistol \$26.50. All of the above arms will be shipped, if requested, C. O. D. subject to inspection. H. D. Dodge, 1300 Powderhorn Park Terrace, Minneapolis, Minnesota.

**FOR SALE**—Smith Featherweight, Trap grade, auto ejectors, 12-ga. single trigger, brand new, \$90.00. Premo No. 12 camera, 25 Tessar lens Compound shutter, film pack and Graflex roll film adapters, velvet lined case for all, new condition, \$45.00. WANT—Winchester S. S. takedown for any C. F. cartridge. C. C. Brown, 6041 McPherson Ave., St. Louis, Missouri.

**WANT**—To buy an accurate Springfield Sporter, also a Colt .22 caliber auto. target pistol. F. A. Kissner, 300 Adams St., Brooklyn, N. Y.

**WILL EXCHANGE**—22 L. R. Reising Auto. pistol, new condition, for Model 52 Winchester with perfect barrel, or for good make stereo-binocular. Some cash to boot. S. E. Johnson, 101 W. Chestnut St., Louisville, Ky.

**FOR SALE**—1,000 rounds, .45 cal. cartridges, for Model 1909 Revolver, \$17. 250-3000, good condition, \$27. A. L. Leonard, Lyndonville, Ver.

**EXCHANGE**—Complete set Alexander Hamilton Institute Course in Business Administration. Sales value \$50. WANT Nat'l. Match .30 Springfield or 1922 .22 Springfield. Must be in good condition. Chas. W. Schoch, Three Rivers, Mich.

**FOR SALE**—One .22 Smith & Wesson heavy frame revolver, 6-inch barrel, blued, target sights, practically new, \$20. One Smith & Wesson single action revolver, 5-inch barrel, blued, .44 Russian cal., inside perfect, frame slightly scratched on one side, very accurate, \$15. One Parker DH, 12 gauge, 28-inch Damascus barrels, cylinder and modifier, recoil pad. List \$142. Price \$75. Nearly new condition. J. A. Van Wie, Burdett Bldg., 251 River St., Troy, N. Y.

**FOR SALE**—Model '95 Winchester .30-'06 solid frame hunting rifle, bought from Winchester's in March 1923, factory number 416831, Lyman number 21 rear sight, Marble's duplex front, scratch in stock near and parallel to butt plate, where I had intended to fit recoil pad for my wife. \$40. Dr. Emil Specht, 67 Hanson Place, Brooklyn, N. Y.

**FOR SALE ONLY**—52 Winchester, with sling, never fired, \$39.75. 22 Reising Auto. with holster, perfect, \$27. 1919 Savage, excellent, \$15. Stanley Armitage, Attica, Ohio.

**WANTED**—100 to 1,000 round of 7.62 mm. Russian Rifle ammunition. 33 cal. Colt's Revolver, U. S. Army Model 1901, for 33 long cartridge, wooden grips and lanyard swivel. Wm. F. Sattler, 514 Park Ave., Collingswood, N. J.

**WANTED**—Springfield .30 '05 Colt, S. & W. or Reising .22 cal. Binoculars, also .22 cal. Springfield or Winchester. Claude Fenton, Burlington, Iowa.

**TRADE**—Ballard Andrews .22 cal. Match rifle, fancy pistol grip stock, with cheek piece. Practically new, guncrank condition, Winchester Mount, bases attached. Will trade for Springfield .22 in same condition. Fred McGee, Midwest, Wyoming.

**FOR SALE**—Prewar .44 Military Model S. & W. Revolver, blued, 6 1/2 inch, brand new. With holster. \$30.00. S. & W. 22 Pocket Revolver, 3-inch barrel, like new, \$15.00. W. E. Haller, 35 Davenport Savings Bank Bldg., Davenport Iowa.

**FOR SALE**—Springfield Rifle, used but still in good condition and shooting well, \$22.00. A. R. E. Room 1001-111 W. Washington St., Chicago, Ill.

**SPECIAL SALE**—25-20 S. S. Winchester tool, new, \$2.50. Ideal Mold No. 457124 \$2.50 new. Ideal mold No. 358311, new, \$2.50. Ideal 30-30 tool, good for mold, recapper, bullet mold, \$2.50. New Ideal Measure No. 5 \$7.50. Ideal Mould, new No. 25720, new, \$2.50. 32 Smith & Wesson Hammerless \$15.00. 38 Smith & Wesson Hammerless \$15.00. 41 Remington Derringer 41 cal. \$7.50. Schilling, Suhl, Germany over-and-under .22 and 410 peep for .22 rifle barrel, sling swivel, cheek piece, fine engraving, indicators tell when cocked, new condition, \$60.00. 16-gauge Automatic Shotgun, fine shot, sling swivels, cheek piece, checkered forearm and pistol grip 25 inch barrel, take-down, new condition, \$60.00. 38 Colt Pocket Model Automatic \$19.00. 25 Colt Automatic \$11.00. 45 Colt Automatic \$15.00. 4 German telescope rifle sights, as is, in working order, \$7.00 each. 2 Springfield 30-06 bayonets, \$6.00 each. Stockbridge Sporting Goods Co., Stockbridge, Mass.

**FOR SALE**—'94 Model Winchester .30-30 oct. barrel, fancy checkered P. G. stock, in fine condition. A few scratches on stock and rear corners of receivers, a little polished. Been fired about 200 shots. Cost \$71.50—sell \$35.00. S. B. Wetherald, Sandy Spring, Md.

**FOR SALE**—Ottway Scope, excellent for 100 yards, fine glass for \$13.00. Two new Parker rods, .22 and .30 cal., with jags for \$1.50 each. Prewar, 30 cal. Waffenfabrik Mauser Pistol \$25. Solid leather 41 inch rifle case \$5.00. 44 S. & W. holster \$1.00. Five hundred 25-yd N. R. A. targets \$3.00. Four hundred 30-06 cartridges \$5.00. Fred N. Anderson, 174 Lafayette St., Suffern, N. Y.

to.  
er  
o-  
n,

ss.  
od  
er.

ll-  
n.  
g-  
od  
ch.

vy  
ret  
es-  
ed,  
ly  
ne  
r-  
42  
an  
Y.

06  
es-  
31.  
ex  
utt  
or  
on

g,  
er,  
15.

m.  
te-  
ng  
el.  
od,

v.  
al.  
ar-

le,  
er  
g.  
id-

&  
th  
er,  
er,  
ort

ill  
A.  
hl-

ol.  
w.  
30  
50.  
ld,  
es-  
on  
41  
d-  
ng  
ors  
6-  
lv-  
tol  
on,  
00.  
tic  
is,  
10-  
mg

ct.  
on-  
or-  
ed  
B.

00  
er  
ch.  
25.  
W.  
A.  
res  
St.,





# The Treaty with Tripoli

THE insolent power of Mohammedan Pirates, terrorizing merchant ships along the northern coast of Africa, was ended by the small fleet of Decatur, Bainbridge, Preble and Truxtun, when they forced the Governor of Tripoli to guarantee protection.

In this, as in every military and naval engagement since the Revolution, the story of du Pont powder has threaded its way through history.

E. I. DU PONT DE NEMOURS & CO., INC.

*Military Sales Division*

WILMINGTON, DELAWARE

In 1805, practically all du Pont explosives were made for military purposes. Today the amount is less than 2 per cent.





FRANK C. PAYNE, PASADENA, CALIFORNIA  
Winner of the Small-Bore Wimbledon Match and  
The Winchester Trophy (McMonies Kit Carson)

## PASADENA PHENOM WINS AT PERRY WITH PALMA

Presenting Mr. Frank C. Payne of Pasadena, California, Winner of the Small-Bore Wimbledon Match at Camp Perry this year with the excellent score of 98 out of 100.

The winning of the Small-Bore Wimbledon is no small achievement. 20 shots at 200-yards with the small-bore rifle is equivalent in effort to the same number of shots at 1,000-yards with the big rifle. To carry the effort to a successful conclusion calls for the best there is in the man, the rifle, and the ammunition; and so with a "fair field and no favor" Frank Payne by virtue of a ranking 98 established his claim to the distinction of being the first to win the McMonies "Kit Carson"—the Winchester Bronze Presentation to the Small-Bore Wimbledon—Shooting Remington Palma .22 Long Rifle Cartridges.

Frank C. Payne is one of the prominent members of the Pasadena Rifle Club and requires no introduction to small-bore or big-bore riflemen—particularly those who attend the annual Camp Perry Meeting each year. From "Commence Firing" to "Cease Firing" each day at Camp Perry he may be found actively engaged in a diligent quest of the elusive bull's-eye—lugging around a small arsenal of guns and great quantities of Remington Palma Cartridges, confident he will win one of the big matches.

Patience and perseverance are the dominant factors in rifle shooting as in everything else, but a vital element which enters into the shooting problem is dependable and highly accurate ammunition. When you shoot Palma ammunition in your rifle you may rest assured that so far as ammunition is concerned you are on even terms with your competitors.

Shoot Remington Palma in the Indoor Matches this winter and convince yourself that in a good rifle Palma cartridges will give maximum results.

***Don't Worry!***  
Don't worry about  
the other fellow's  
score.  
Let him  
worry about yours.  
***Shoot Palma***

**REMINGTON  
PALMA  
THE  
PREMIER  
LONG RIFLE CARTRIDGE**



**SHOOT REMINGTON GAME LOADS for UNIFORM VELOCITY PATTERN and PENETRATION**

